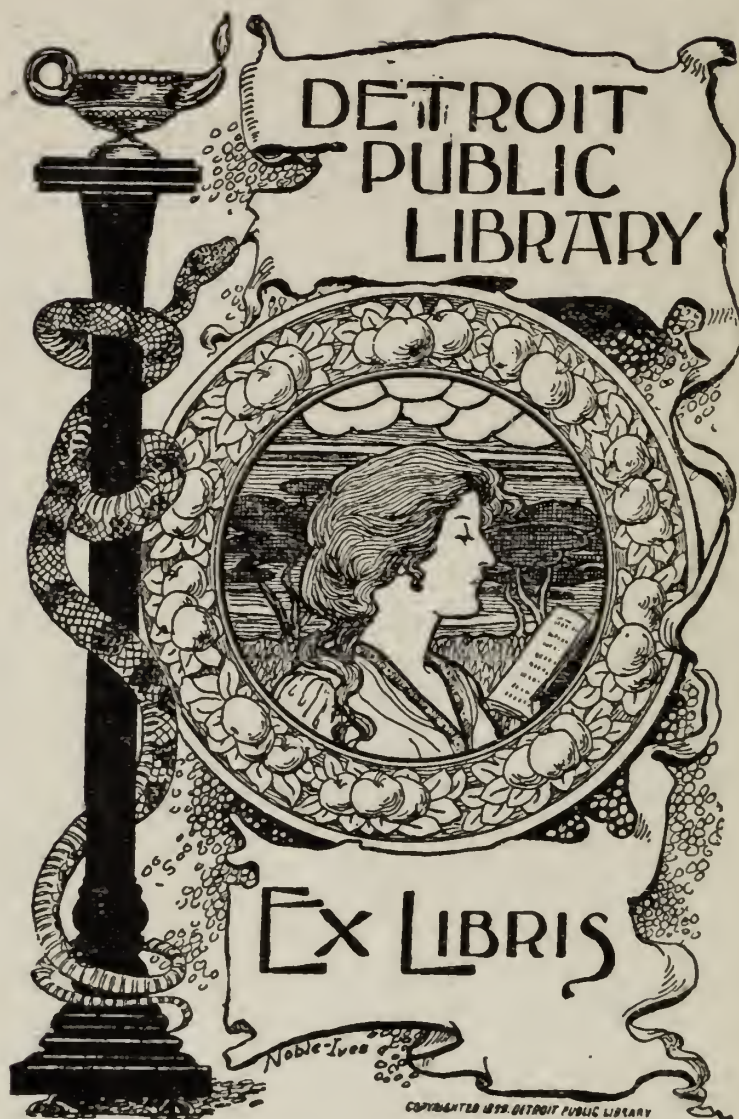


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COLORADO



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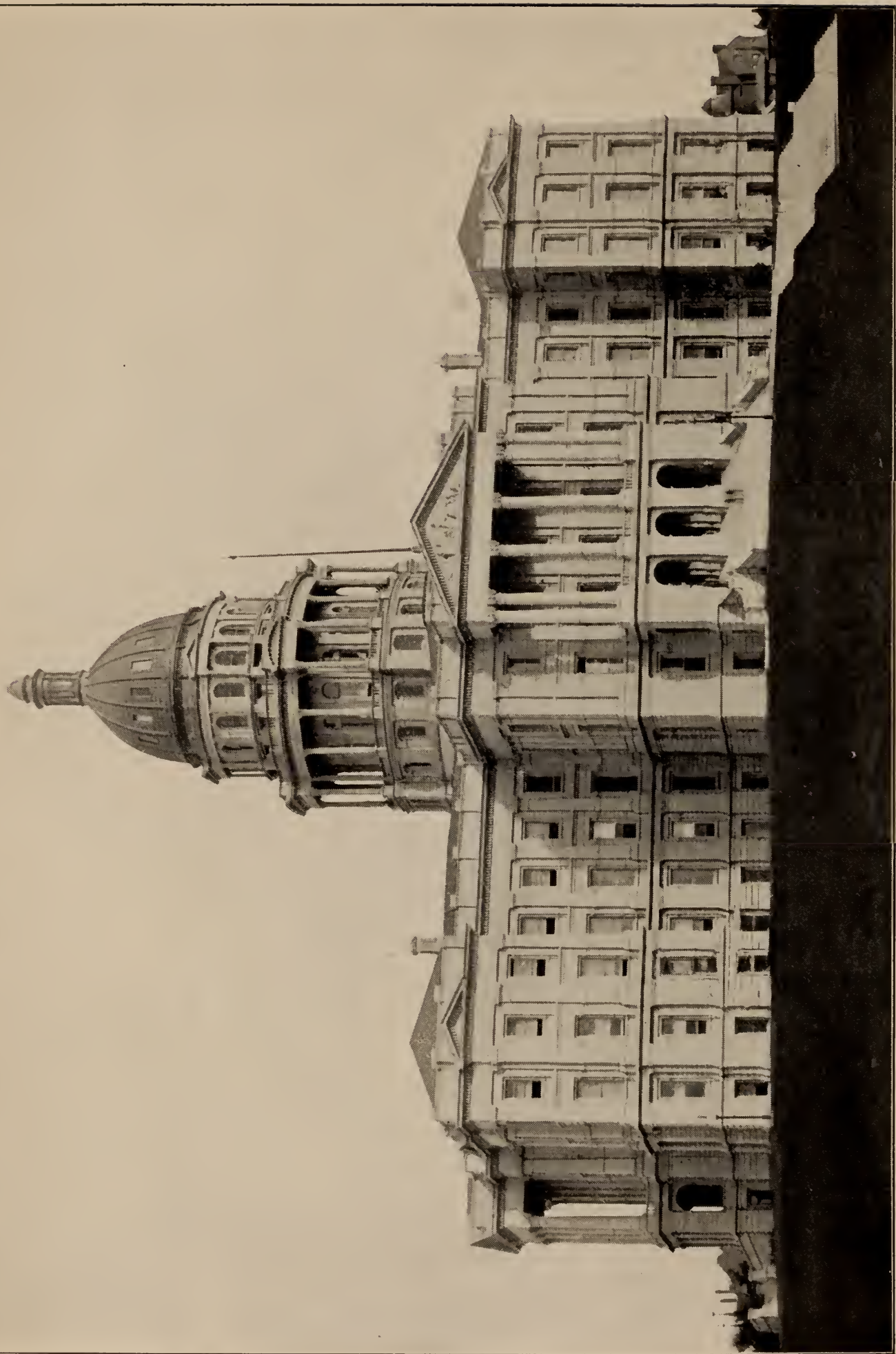






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**EDWIN V. BRAKE**

Deputy Labor Commissioner  
Colorado





✓

Thirteenth Biennial Report

OF THE

Bureau of Labor  
Statistics

OF THE

State of Colorado

---

1911-1912

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JAMES B. PEARCE, Secretary of State, Commissioner ex officio  
EDWIN V. BRAKE, Deputy Commissioner and Chief Factory Inspector



DENVER, COLORADO  
THE SMITH-BROOKS PRINTING CO., STATE PRINTERS  
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JAMES B. PEARCE  
Secretary of State and Ex Officio Labor Commissioner





## LETTER OF TRANSMITTAL

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To His Excellency,  
ELIAS M. AMMONS,  
Governor of Colorado.

Sir: I herewith submit for your consideration the thirteenth biennial report of the Bureau of Statistics.

The State Department of Factory Inspection, the state free employment offices, and the duty of licensing and supervising the operation of the private employment offices of the state, together with the enforcement of laws made to protect the interests of the wage-earners, comprise the duties of this department. A full report upon the work accomplished by these departments is here submitted.

The law requires that this report be limited to 300 pages. I have had to abbreviate reports upon all departments to come within this limit.

Respectfully submitted,

EDWIN V. BRAKE,  
Deputy Labor Commissioner and Chief Factory Inspector.

## PERSONNEL OF THE DEPARTMENT

---

### BUREAU OF STATISTICS

JAMES B. PEARCE,  
Secretary of State, Commissioner ex officio  
EDWIN V. BRAKE,  
Deputy Labor Commissioner and Chief Factory Inspector  
RICHARD E. CROSKEY,  
Statistician  
GRACE HARPER,  
Stenographer

---

### FACTORY INSPECTION DEPARTMENT

GENEVIEVE MILES,  
Deputy Factory Inspector  
FREDERICK WEINLAND,  
Deputy Factory Inspector  
GEORGE R. HOWE,  
Deputy Factory Inspector  
FRANK HERMOND,  
Deputy Factory Inspector  
JAMES McDOWD,  
Clerk  
CHARLOTTE M. FRY,  
Stenographer

---

### FREE EMPLOYMENT OFFICE DEPARTMENT

ELI M. GROSS,  
Superintendent Office No. 1, Denver  
MRS. IMOGENE CLARK,  
Assistant Superintendent Office No. 1, Denver  
FRANK J. KRATKE,  
Superintendent Office No. 2, Denver  
MRS. MARY E. HOBBS,  
Assistant Superintendent Office No. 2, Denver  
LEE A. TANQUARY,  
Superintendent Pueblo Office  
ELIAS ANDERSON,  
Assistant Superintendent Pueblo Office  
WILLIAM C. DAILY,  
Superintendent Colorado Springs Office  
GEORGE BAINTEK,  
Assistant Superintendent Colorado Springs Office

---

### PRIVATE EMPLOYMENT OFFICES

FRANK MANCINI,  
Collector of Licenses and Supervisor



Thirteenth Biennial Report  
of the  
Bureau of Labor Statistics  
of the  
State of Colorado

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CHAPTER I

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REVIEW OF WORK DONE BY THE DEPARTMENT AND  
RECOMMENDATIONS

---

BY EDWIN V. BRAKE, DEPUTY LABOR COMMISSIONER AND CHIEF  
FACTORY INSPECTOR

---

CREATION OF THE BUREAU AND ADDITIONS THERETO

The department of the Bureau of Labor Statistics was established in Colorado by the legislature of 1887. The Secretary of State was designated Labor Commissioner ex officio, with authority to appoint a Deputy Commissioner who shall have charge of the department and be its executive head.

The law provides that the Deputy Commissioner shall gather statistics on thirteen different subjects, namely:

First—Agriculture.

Second—Mining.

Third—Mechanical and manufacturing industries.

Fourth—Transportation.

Fifth—Clerical, and all other skilled and unskilled labor not above mentioned.

Sixth—The amount of cash capital invested in lands, buildings, and machinery severally, and means of production and distribution generally.

Seventh—The number, age, sex, and condition of persons employed; the nature of their employment; the extent to which the apprenticeship system prevails in the various skilled in-

dustries; the number of hours of labor per day; the average length of time employed per annum, and the net wages received in each of the industries and employments within the state.

Eighth—The number and condition of the unemployed; their age, sex, and nationality; together with the cause of their idleness.

Ninth—The sanitary condition of lands, workshops, dwellings; the number and size of rooms occupied by the workers, etc.; the cost of fuel, rent, food, clothing, and water in each locality of the state; also the extent to which labor-saving processes are employed to the displacement of hand labor.

Tenth—The number and condition of the Chinese in the state; their social and sanitary habits; the number of married and of single; the number of employed and the nature of their employment; the average wages per day at each employment, and the gross amount yearly; the amount expended by them in rent, food, and clothing, and in what proportion such amounts are expended for foreign and home productions, respectively; and to what extent their labor comes in competition with other industrial classes of the state.

Eleventh—The number, condition, and nature of the employment of the inmates of the state prison, county jails, and reformatory institutions, and to what extent their employment comes in competition with the labor of mechanics, artisans, and laborers outside of these institutions.

Twelfth—All such information in relation to labor as the Commissioner may deem essential to further the objects sought to be obtained by this statute.

Thirteenth—A description of the different kinds of labor organizations in existence in the state, and what they accomplish in favor of the class for which they were organized.

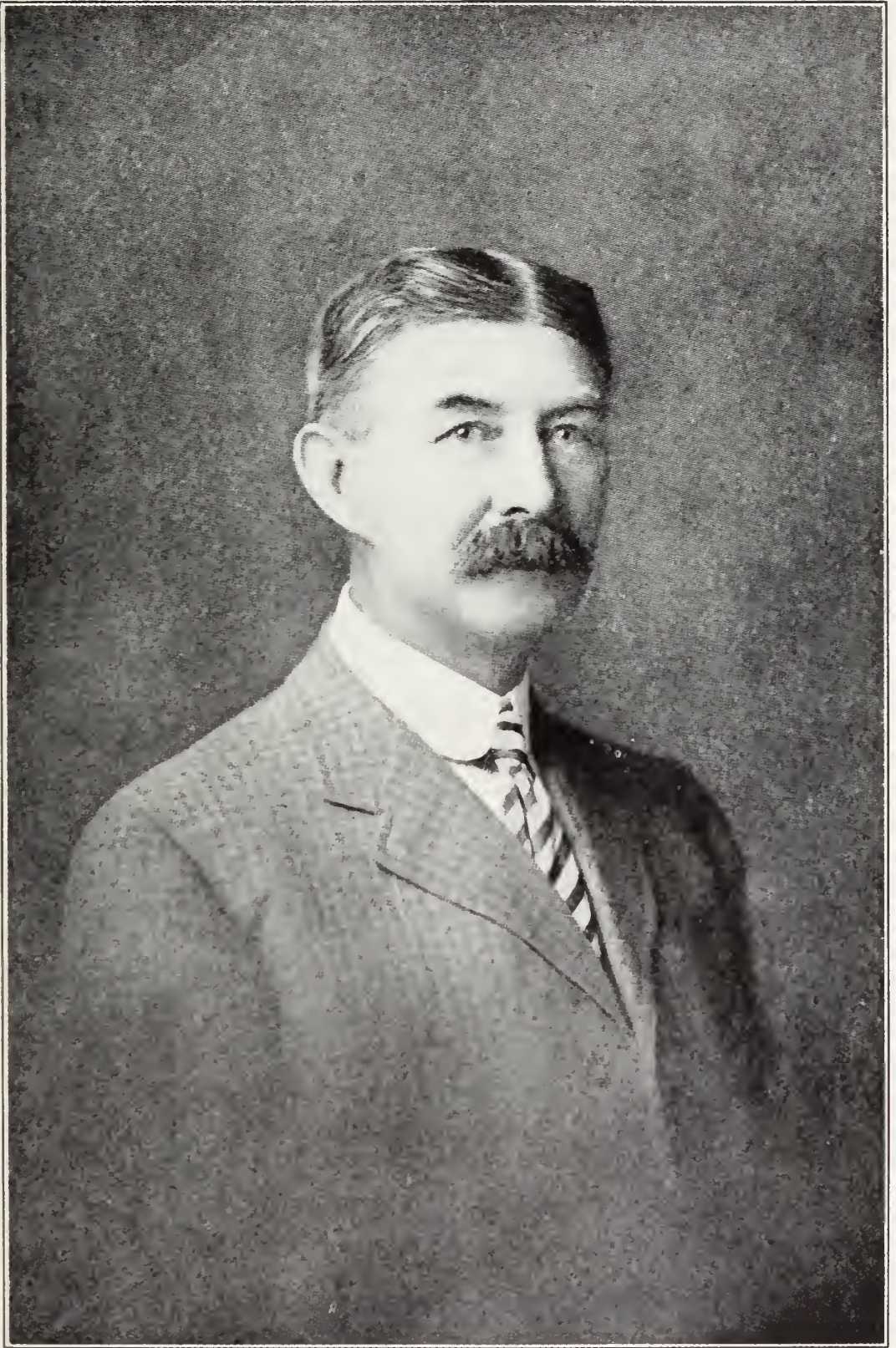
#### BUREAU OF STATISTICS

The Bureau of Labor Statistics proper has charge of the statistical work, and is composed of myself as Deputy Labor Commissioner, a statistician, and a stenographer. This department is not only charged with the collection of statistics, but also with the enforcement of all laws upon the statute-books in Colorado passed for the benefit and protection of the wage-earners. I will quote you the law imposing its duty upon the Deputy Labor Commissioner:

"It shall be the duty of the Deputy Labor Commissioner to cause to be enforced all laws regulating the employment of men, minors and women, all laws for the protection of the health, lives and limbs of all operators in factories, mills, mines, workshops, offices, bakeries, laundries, stores, hotels, railroads, or any public or private works where labor is employed or machinery used, and all laws enacted for the protection of wage-earners."

This alone if properly attended to, would require at least four special inspectors; and we have none in this bureau. The





EDWIN V. BRAKE  
Deputy Labor Commissioner





correspondence that comes to the Bureau of Labor Statistics covers the widest possible range of subjects. Hundreds of letters of inquiry from within and without the state are being handled by the statistician and stenographer. Not only inquiries concerning the resources of the state are received, but such other subjects are handled by the bureau that I have become convinced that the reputation established by this bureau throughout the United States for general knowledge on economic questions has induced a great many of the colleges, civic bodies, and, in fact, all of the advanced thinkers of the country to inquire of this department concerning the live issues of the day. This alone requires almost all of the time of the statistician that he can possibly take from his statistical work. To the stenographer in this department has been assigned the duty of issuing all licenses for private employment agencies, keeping the records, and exercising a general supervision over that department. In addition to this work, the stenographer has had charge of the collection department. While it is true that there is no special statute in the law above quoted requiring this department to look after the collection of wages, the department has assumed that extra work. This not only entails an extra amount of work, but is one of the meritorious things that the department is called upon to perform. Our object is to secure through the free employment offices employment for the unemployed, and where any controversy over wages has arisen, we have assumed the obligation of acting in the capacity of arbitrator to settle such dispute.

To give you some idea of the immense amount of work of this stenographer in the Bureau of Labor Statistics, I wish to call your attention to the following: There is no law requiring the department to collect wages for the workers from would-be "dead-beat" employers, but 1,546 such claims were taken care of, and \$45,620.83 was collected and turned over to the wage-earners without a cent of cost to them. This was all extra work. When you take into consideration the large sum that has been collected by this department, and when you consider that these collections, mostly in very small sums, were made for people who were absolutely penniless and unable to bring suit in the courts, you must appreciate the magnitude of the work, as well as the good that has accrued to the poor, uneducated wage-earners, who were unable to get the proper redress that is afforded by the courts.

Thousands of letters, accompanied by schedules, have been mailed to the manufacturing merchants, county assessors, and labor organizations throughout the state, for the purpose of gathering statistics that would be of value to the entire state. We have been seriously handicapped in the statistical work, for the reason that large numbers of people receiving these letters and schedules pay no attention whatever to filling out and returning them, notwithstanding that we had taken the precaution to enclose a return envelope stamped.

I have asked, in House Bill No. 33, by Mr. Leftwich, for an assistant to this department, at a salary of \$1,500 per annum, with \$350 a year traveling expenses; also \$350 a year traveling expenses for the statistician. This small annual sum is insignificant to the State of Colorado when compared with the good results that we could have, were we provided with the assistant and the traveling-expense money. At the present time there is no one except myself who can go outside of the city of Denver to assist in the enforcement of the laws, or to settle a labor dispute, or for statistical purposes, or for anything connected with the department. I find that my time is entirely taken up as executive head of the department, by giving it my personal supervision in the office. There are now seventeen employes in the various branches of this bureau, covering six different departments, and in order to properly attend to these duties, it is impossible for me to leave the city for any great length of time.

#### FACTORY INSPECTION

The Factory Inspection Department consists of four deputy factory inspectors, a stenographer and clerk. During the past sixteen months the four inspectors inspected 5,371 establishments, employing 62,538 people. A total of 3,241 inspection orders were issued for safety guards around machinery, sanitary improvements, and fire escapes. Each of these orders contained recommendations for a great many improvements. Supplementary inspections are made to see that the orders have been complied with. This places an immense amount of work upon four people, and scattered all over the entire State of Colorado. After an order has been issued, objections sometimes occur, and numerous letters have been exchanged before the orders have been complied with. This entails an immense amount of office work. It would be a physical impossibility for any one person, however competent, to handle the factory-inspection desk alone, but with the assistance of a stenographer the work is kept in good shape. In this department, as well as in all the branches of the Labor Bureau, everything is card-indexed, a record is kept of each and every transaction, and all correspondence is indexed and filed, so that upon five minutes' notice the clerks in charge of the office can give you the results of any investigation or any complaint that has been lodged in the department for the past four years.

#### CHILD LABOR

In addition to the duties imposed upon the factory inspectors, two years ago the legislature passed a child-labor law, especially designating the Factory Inspection Department as the one department in the state to look after the enforcement of the law. This has entailed a great deal of extra work in addition to the regular duties. We have acted upon hundreds of complaints. This requires time and expense, and I feel warranted in saying that in no place in America has the employment of children been



better safeguarded than in this state. We have compelled messenger-service companies to quit sending children to resorts with messages; we have stopped the custom of children serving liquors; and after we have done such splendid work in co-operation with the juvenile courts and school authorities, we feel warranted in saying that this state at the present time has the question of child labor under absolute control.

#### WOMAN'S EIGHT-HOUR LAW

There was a popular demand for years for the passage of a woman's eight-hour law. The best proof of this assertion was the fact that the initiated law was carried by 76,000 majority. The enforcement of this law depends almost entirely upon the efforts put forth by this department. While it is true that any individual can make a complaint to the district attorneys, yet I have found that no law of any kind or character can be enforced unless some special effort is put forth to secure evidence and make an investigation, and assist the district attorneys in every way possible. The Factory Inspection Department is the only means we have of enforcing this law. Hundreds of complaints have been filed in this office, alleging that different employers are violating the law. Each and every one of these complaints must be investigated, and it has to be done through the deputy factory inspectors, as they are the only inspectors that we have in this entire department.

Numerous complaints are constantly being made to this department concerning violations of the municipal eight-hour laws in the various towns and cities of this state; also complaints from miners as to the violation of the law giving them a check weighman. Complaints are being made almost daily that scales are not correct; that men are being peoned or coerced in different sections of the state. All of these various complaints have to be handled by the deputy factory inspectors, except in Denver, Colorado Springs, and Pueblo, where a great deal of this work is done by the superintendents and assistant superintendents of the free employment offices. In order to properly look after the interests of the wage-earners of Colorado, we could use to good advantage at least a dozen inspectors.

#### FREE EMPLOYMENT OFFICES

One of the most efficient and beneficial branches of the Labor Department is the free employment offices. For years labor organizations, woman's clubs, and all those interested in economic conditions tried to get through the legislature a bill creating the free employment bureaus; with no result, however, until six years ago, when I succeeded in getting the law passed that is now on the statute-books. That law provides for two offices in Denver and one each in cities of a population of 25,000 or over. During the first two years of the operation of this law the offices in Pueblo and Denver were not as efficient as they should be, owing principally to the fact that the men in charge were given the position

purely from a political standpoint and were not in sympathy with the purpose for which the offices had been created. The Colorado Springs office under Wesley Nethers was a success from the start, because he took a deep interest in the matter and the result of his work has been of material benefit to all of his successors.

I believe that it is wrong in principal to compel a man or woman to pay for a job; it should be the duty of the state to bring employer and employee together without any cost to either. No man or woman is entitled to a living unless they are willing to work for it, but they should not be compelled to pay an exorbitant, or any price in fact, for work. It is the duty of the state to see that they are provided with employment. As an illustration of the efficiency of this branch of the Bureau of Labor Statistics, I desire to submit some figures: For the past two years 30,787 positions were furnished free of charge to wage-earners, 21,652 were men, 9,135 women, or an average of 15,394 for each year of 1911 and 1912. In my judgment, we can increase the number of positions secured fully 50 per cent in Pueblo and Colorado Springs, provided we had a small amount for advertising as the law provides. In Denver we can increase the number of positions secured 200 per cent, provided House Bill No. 32, now in the Senate, is passed.

The difficulty heretofore has been that with one office in Denver, and without sufficient appropriation to pay a reasonable rent in a good locality, we have been compelled to try and maintain the office in the second story of the Railroad Building on Larimer street. This location is too far up-town to come in contact with the common laborers and is too far down-town to handle the woman wage-earner. By the establishment of two offices, one on Market street and the other up-town, we will be able to serve both classes and I feel assured that it is conservative to say that we can increase fully 200 per cent.

The superintendents and assistant superintendents of the free employment offices, aside from the duties prescribed by the statute, have very willingly given their time to help in other branches of the Labor Department; not only have they secured positions for the unemployed, but they have assisted in the collection of wages and in the enforcement of the laws that have been passed for the protection of the wage-earner.

It may not be out of place to make a comparison between the three Colorado free employment offices and the five in the state of Connecticut for the year 1910; the three offices in Colorado during 1910 furnished employment to 18,865, and the five offices in Connecticut in a thickly populated community, where there is access to thousands of manufacturing establishments, secured positions for 8,126. With exception of Seattle, Washington, the United States reports on free employment offices show that Colorado, though sparsely settled, with few manufacturing establishments, stands at the head of the list for number of positions secured and



general efficiency. Any effort to curtail or hamper in any manner the work of this branch of the Bureau of Labor Statistics is unwarranted and will be a step backwards, because it is generally conceded by all students that these free employment offices should be maintained and strengthened in every way possible with the ultimate object of finally putting the private employment offices out of business, purely upon the ground that it is wrong in principle and unfair to require any wage-earner to pay for an opportunity to work.

#### PRIVATE EMPLOYMENT OFFICE SUPERVISION

The private employment agencies are required, under the law, to take out a license through this bureau and give a bond for the faithful compliance to the statute. This branch of the Labor Department is one of the prides of the service; more good has been accomplished for the wage-earner by the control of private employment agencies than we have time or space to enumerate. It was a common occurrence in the past to charge men exorbitant prices for a position and in numerous cases charged them exorbitant prices for positions that they never got; men were shipped a long distance from Denver and Colorado, who, upon arriving at their destination, found that they had been robbed of their money and time and no job awaited them. This no longer exists. For the past four years this branch of the Labor Department has been as efficient as is possible to make it. The principle of charging men large fees for securing employment has been discontinued, the principle of sending men to remote sections of the country, when there was no position for them, has ceased to exist. I might recite numerous instances where this department has compelled private employment agents to reimburse applicants for work, not only for office fee and railroad fare, but the time spent coming and going. Only in the last year, as one illustration in point, an employment agent sent twenty-six Italians to Needles, California; the men arrived stranded, without any place to eat or sleep and no job. This department took up the matter and compelled the employment agent to telegraph money to maintain these people and to secure them positions, which was done in a very short time. Numerous conditions of this kind occur almost weekly, and if anyone would take the time to inquire of the district attorney's office or the police department of Denver, they will find that the complaints against the private employment agents have been reduced to the minimum.

When this law went into effect I found a great many men engaged in the business who could not be straight under any circumstances; they are no longer engaged in the business. The Deputy Labor Commissioner has the authority, under the law, to revoke licenses and we have availed ourselves of the law in every case where we found that the agent was doing an illegal business. As long as private employment agencies are allowed to exist they

must be under the supervision of some one in order to make them comply with the laws. During the past four years numerous suits have been brought for the violation of the law, and convictions made so that we feel perfectly satisfied that everything that is possible under the law has been done to safeguard the interests of the wage-earners. The sixth branch of this department—the information bureau—should be provided with at least one regular clerk. This work is being done by the statistician and stenographer in addition to their other duties.

#### COST OF THE DEPARTMENT

The Eighteenth General Assembly placed the Factory Inspection Department on the payroll of the state, abolishing the fee system upon which, prior to August, 1911, it had been maintained. With the appropriation for this department of factory inspection, the Bureau of Statistics and free employment offices combined, the Eighteenth General Assembly appropriated for the maintenance and salaries of the departments for the biennial period the sum of \$45,600. With the closest economy practiced in the running of the various departments, the sum of \$35,778.80 was used in the biennial period, thus returning to the state treasury the sum of \$9,821.20. With this record I do not believe that the Department of Labor of Colorado can be justly accused of an extravagant use of public funds.

## CHAPTER II

---

### FACTORY INSPECTION DEPARTMENT REPORT

This report covers the period from August 4, 1911, when the amended law, abolishing fees charged for inspection of premises and providing an appropriation from state funds for the payment of the expenses of the department, went into effect, up to the end of the fiscal year 1912, November 30, a period of approximately sixteen months.

The amended law reduced the number of deputy inspectors from six to four, and during the sixteen months cited, these four deputy inspectors inspected 5,371 establishments, employing 62,538 people, and issued 3,245 orders and recommendations for safety-guards on machines, and other improvements, as follows:

Safety guards on and around machinery.....	1,006
Guard rails around machinery, stairs and openings.....	821
Fire escapes, new and improvements on old.....	52
Sanitary regulations, new toilets, etc.,.....	243
Safety and sanitary repairs and improvements.....	157
Separate dressing rooms for male and female.....	11
Seats for women working in stores.....	14
Hotels—install red lights, rope fire escapes, provide 9-foot top sheets, and individual towels.....	941

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3,245

The larger portion of these orders have been complied with, and daily the bureau is apprised of the fact that others have complied with the suggestions, recommendations and orders of the inspectors; a reasonable amount of time is allowed the various establishments to comply with the orders given, when, if such notification is not received, a return visit is made by the inspector to ascertain the reason of the non-compliance with the order given. There are, as might be expected, some proprietors of establishments who object to providing safety devices for their machinery or maintaining sanitary conditions in their workshops, but these are few, and usually the places that require the operation of the factory inspection law the most. As a general rule the proprietors or managers of the manufacturing and mercantile establishments welcome the inspection of their premises and readily comply with the suggestions or orders given by the inspectors. The opposition to the law that formerly existed was caused by the imposition of



the inspection fee. With the elimination of this feature by the Eighteenth General Assembly there now exists but little opposition to the law. It is generally recognized as a necessary and humane law, protecting the wage-earners and general public. The number of employes working around machinery that it has protected from injury or death will, of course, never be known, and likewise the same can be said of the number of the general public whose health is being protected by the enforcement of proper sanitary regulations in hotels, bakeries, and surrounding the preparation of foodstuffs.

In amending the law the Eighteenth General Assembly added to it more stringent sanitary regulations and better protection from fire for hotel guests. The installing of 9-foot top-sheets on all beds; the abolishment of the roller towels in all wash rooms, and the placing of individual towels in these places; and, for the protection from fire, the installing of a hemp rope in each room, the same to be firmly attached to the wall in such manner that it may be thrown out of the window to allow persons to escape in case of fire, the same to apply to all hotels and boarding and bunk-houses of more than two stories in height; and that red lights shall be displayed with the words "Fire Escape" on the globes at each fire escape. A total of 941 notices and orders were issued to hotel and boarding-house keepers to install these devices and sanitary regulations. Several hotels have protested against installing all of the articles named, claiming that they were not necessary, etc. At the same time they have complied in part with the orders given. It is recognized that the installing of all requirements of the law in these matters is sometimes costly, and that time should be allowed, consistent with the proper protection of the citizens and guests of the state, for the strict compliance by the hotel proprietors with the orders given. There is little trouble with the newly constructed or fitted hotels, as they are generally fitted with all requirements of the law in the matter of safety and sanitary regulations.

The total appropriation made by the legislature to support the Department of Factory Inspection for the sixteen months reported on was \$13,720.02, of which \$12,002.69 was used, returning to the state treasury \$1,717.33. The deputy inspectors receive \$1,200 yearly salary, and an additional \$600 is allowed for necessary traveling expenses. A salary of \$1,200 per annum is allowed for a clerk and stenographer each, and \$500 per annum for office supplies, postage, etc.

The amounts drawn by deputies and clerks in the sixteen months were:



Genevieve Miles, deputy inspector.....	\$ 1,715.97
Frederick Weinland, deputy inspector.....	2,169.17
George R. Howe, deputy inspector.....	2,140.63
Leroy Monical, deputy inspector.....	2,057.35
Frank Mancini, clerk.....	1,586.67
Charlotte M. Fry, stenographer.....	1,586.67
Office expenses, stamps, stationery, etc.....	746.23
<hr/>	
Total .....	\$12,002.69
Returned to treasury.....	1,717.33
<hr/>	
	\$13,720.02

Additional duties were placed upon the factory inspectors by the passage by the Eighteenth General Assembly of the child-labor law. Section 2 of this act requires that "The State Inspector of Factories, his assistants or deputies, shall visit all mercantile institutions, stores, offices, laundries, manufacturing establishments, bowling alleys, theatres, concert halls or places of amusements, factories or workshops, and all other places where minors are or may be employed in this state, and ascertain whether any minors are employed contrary to the provisions of this act. Inspectors of factories may require that age and school certificates, and all lists of minors employed in such factories, workshops, mercantile institutions, and all other places where minors are employed, as provided for in this act, shall be produced for their inspection on demand. And, provided further, that upon written complaint to the school board or local school authorities of any city, town, district or municipality, that any minor (whose name shall be given in such complaint) is employed in any mercantile institution, store, office, laundry, manufacturing establishment, bowling alley, theatre, concert hall or place of amusement, passenger or freight elevator, factory or workshop, or as messenger or driver thereof, contrary to the provisions of this act, it shall be the duty of such school board or local school authority to report the same to the State Inspector of Factories."

The law also requires that all permits issued to children under age shall be reported to the State Factory Inspector, the number of permits so reported to this office since the operation of this act, is 1,155. This, however, is far in excess of the number of children that had permits to work, as a large number of the permits issued were duplicates issued to the same boy or girl when changing their employers. The record follows:

Number of permits issued in the state, 1,155.

City	Employed Steadily			Employed After School		
	Boys	Girls	Ages	Boys	Girls	Ages
Denver .....	417	213	14-16	453	32	13-15
Colorado Springs.....	19	5	14-16	1	..	.....
Pueblo .....	12	4	14-16	..	..	.....
Trinidad .....	8	1	14-16	..	..	.....

From this report it will be seen that of all the cities in the state Denver alone is the only one that is thoroughly taken care of in the matter of child labor. The other cities of the state, with the possible exception of Colorado Springs, are either lax on the part of the school authorities in issuing certificates, or that no certificates are issued at all. The reason for this is the fact that the school authorities of Denver have provided truant officers to watch for children working without permits, while in other parts of the state they appear to take no notice of it. It is impossible for the factory inspectors to watch this matter exclusively, and their duties take them in all parts of the state, and by reason of the large territory that the four deputy inspectors have to cover it is physically impossible for them to visit one locality more than once or twice a year and attend to their other duties. The child-labor law, as introduced in the Eighteenth General Assembly, provided for an inspector whose duty it should be to attend to this work exclusively, and for the proper enforcement of this law one such inspector is urgently needed that the law may be as well enforced in the other sections of the state as it is by both the school authorities, the officer of the juvenile court, and the factory inspectors in Denver. This state has not been cursed to any great extent with the problem of child labor, and it is well for the welfare and reputation of the great state of Colorado that it should never be allowed to take root in its soil. My deputy inspectors have effectually stopped child labor when and wherever they have found it, and when cases have been brought to the attention of the office they have been promptly attended to either by my deputies or myself and office force.

A comparison between the United States Government report on the number of manufacturing establishments in the state and the number of their officers and employes shows that in 1909, the time the last census was taken, there were 2,038 factories doing business in Colorado, as against 2,082 found and inspected by the State Factory Inspectors in 1911-1912, a gain of 44 establishments; the number of employes or persons engaged in factories in 1909 was 34,115, the number reported by the state inspectors in 1911-1912 is 38,443, a gain of 4,328 employes.

The percentage of gain in the three years is fully up to that reported by the government census officers for like periods in the state's history, which in itself, is proof of the efficient work done

by the state inspectors, and it should be remembered, there are some localities of the state, though small isolated places, that it was not possible in the sixteen months reported upon, for the state inspectors to reach.

As far as possible the Bureau of Statistics has tried to obtain the amount of capital invested, amount produced and all other matters touched upon by the United States Government enumerators. With this in view, some 6,000 manufacturing and mercantile schedules were sent to the manufacturers of the state in whole, and the mercantile establishments in part, requesting this information and also the amount of wages paid the different employes, but from the insufficient manner in which these schedules were returned it has been found impossible to get the information desired, and the only way that this work can be accurately done is by a personal visit by an officer of the bureau to the establishments, and this there is no provision in the law creating the bureau for funds to do. Some traveling expenses should be allowed the statistician, that he may by personal visit gain the information so much desired by the commercial bodies of the state. The amount of wages paid employes in the different branches has been ascertained in a reasonable degree of accuracy and these are so given. Denver, comprising one-third of the state, is given in detail in the report on the manufacturing and mercantile establishments, hotels, and laundries of the state in the cities and towns here presented.



## DENVER MANUFACTURING

Establishments	No.	Employees		Male		Wages		Female		Hours	
		Male	Female	Highest	Lowest	Average	Highest	Lowest	Average	Male	Female
Auto companies .....	25	181	13	\$7.50	\$ .85	\$3.00	....	....	....	9	..
Asbestos works .....	1	4	...	....	....	....	....	....	....	..	..
Artificial limbs .....	1	4	...	....	....	....	....	....	....	..	..
Arc light companies .....	1	5	..	....	....	....	....	....	....	..	..
Art glass companies .....	4	36	...	....	....	....	....	....	....	..	..
Brewing companies .....	4	225	...	5.75	2.90	3.35	....	....	....	8½	..
Bottling works .....	18	202	13	4.00	2.00	2.75	....	....	....	9	..
Bakeries .....	77	286	128	7.00	1.66	2.66	\$1.25	\$ .75	\$1.00	9	9
Bedding companies .....	4	58	31	3.00	.50	2.25	1.50	1.25	1.66	9	9
Brick companies .....	5	121	...	5.00	2.90	3.56	....	....	....	8½	..
Broom companies .....	2	24	1	1.75	1.00	1.75	1.00	1.00	1.00	9	8½
Brass works .....	4	35	...	3.50	2.00	2.95	....	....	....	9	..
Brush companies .....	2	3	1	....	....	....	....	....	....	..	..
Bicycle shops .....	11	22	...	....	....	....	....	....	....	..	..
Box companies .....	6	44	55	....	....	....	....	....	....	..	..
Blacksmith shops .....	5	16	...	....	....	....	....	....	....	..	..
Cigar companies .....	13	194	56	6.00	2.00	3.50	1.25	1.25	1.25	8	8
Confectionery companies .....	17	227	113	4.00	.75	2.50	2.00	.50	1.30	10	10
Cleaning companies .....	14	36	23	5.00	.40	2.25	2.00	1.00	1.50	8½	8
Creamery companies .....	9	83	50	3.00	2.00	3.00	2.50	1.00	1.75	9	8



[illegible]



Optical companies .....	1	10	...	....	....	....	....	....	....	..
Plumbing companies .....	7	44	...	5.00	1.60	4.25	....	....	....	8½
Printing companies .....	59	1,054	198	10.00	.50	3.25	4.00	1.00	2.00	8
Packing and Provisions .....	11	519	18	3.50	2.00	2.70	....	....	....	10
Paint companies .....	6	38	4	2.92	2.75	2.85	....	....	....	9
Pickle works .....	3	52	55	2.00	1.75	2.00	1.25	1.00	1.25	9½
Photo companies .....	1	2	2	....	....	....	....	....	....	..
Pottery works .....	1	29	1	....	....	....	....	....	....	..
Railroad shops .....	6	1,294	...	....	....	....	....	....	....	..
Roofing companies .....	2	19	...	....	....	....	....	....	....	..
Rubber works .....	2	9	1	....	....	....	....	....	....	..
Repair shops .....	42	121	...	....	....	....	....	....	....	..
Shoe companies .....	21	111	25	3.00	1.00	2.25	....	....	....	10
Sheet metal companies .....	10	95	1	5.00	2.00	3.20	2.00	2.00	2.00	8
Sugar companies .....	2	5	...	....	....	....	....	....	....	..
Sign companies .....	4	15	...	....	....	....	....	....	....	..
Switchboard company .....	1	2	...	....	....	....	....	....	....	..
Seed company .....	1	20	10	....	....	....	....	....	....	..
Supply companies .....	10	123	13	....	....	....	....	....	....	..
Smelting companies .....	2	502	...	....	....	....	....	....	....	..
Street car company .....	1	334	...	....	....	....	....	....	....	..
Steel pipe companies .....	3	46	...	....	....	....	....	....	....	..
Suspender company .....	1	1	2	....	....	....	....	....	....	..
Surgical company .....	2	6	...	....	....	....	....	....	....	..

Piece work



## DENVER MANUFACTURING—Concluded

Establishments	No.	Employees		Male		Wages		Female		Hours	
		Male	Female	Highest	Lowest	Average	Highest	Lowest	Average	Male	Female
Tailor and clothing companies .....	64	136	294	6.00	2.00	3.40	3.00	1.00	2.00	9	8
Taxidermist .....	2	4	1	2.00	1.25	1.75	1.25	1.25	1.25	8½	8½
Tent and awning companies .....	4	24	52	3.00	2.75	2.90	2.00	1.75	1.90	8½	8½
Trunk companies .....	8	40	1	....	....	....	....	....	....	..	..
Wagon shops .....	22	126	3	4.25	1.00	2.78	2.00	2.00	2.00	9	9
Yeast company .....	1	9	6	....	....	....	....	....	....	..	..
Water companies .....	3	32	1	....	....	....	....	....	....	..	..
TOTALS .....	771	9,964	1,378								

## DENVER MERCANTILE

Establishments	No.	Employees		Male		Wages		Female		Hours	
		Male	Female	Highest	Lowest	Average	Highest	Lowest	Average	Male	Female
Auto companies .....	5	18	3	....	....	....	....	....	....	..	..
Adding machine companies .....	1	11	1	....	....	....	....	....	....	..	..
Book stores .....	7	41	40	....	....	....	....	....	....	..	..
Brewing companies .....	1	4	...	....	....	....	....	....	....	..	..
Barbers' supplies .....	1	7	1	....	....	....	....	....	....	..	..
Bath houses .....	2	4	1	....	....	....	....	....	....	..	..
Bottling companies .....	2	2	...	....	....	....	....	....	....	..	..
Commission companies .....	46	414	32	\$4.00	\$1.25	\$2.85	\$2.75	\$2.00	\$2.50	10	8
Construction companies .....	5	82	...	3.00	2.00	2.50	....	....	....	10	..
Creameries .....	3	1	2	....	....	....	....	....	....	..	..
Casket companies .....	3	13	1	....	....	....	....	....	....	..	..
Crockery companies .....	2	9	1	....	....	....	....	....	....	..	..
Drug companies .....	34	190	159	3.75	2.00	3.00	2.00	2.00	2.00	11	10
Dry goods companies .....	106	1,723	2,176	8.35	.65	3.00	5.00	.25	1.80	10	9
Express companies .....	3	76	...	....	....	....	....	....	....	..	..
Electric companies .....	3	9	2	....	....	....	....	....	....	..	..
Furniture companies .....	20	176	15	6.00	1.00	2.55	2.00	1.00	1.50	9	8
Freight companies .....	5	404	16	....	....	....	....	....	....	..	..
Flower companies .....	2	4	1	....	....	....	....	....	....	..	..
Grocery companies .....	134	889	128	6.00	1.00	3.25	2.50	1.00	1.55	10	9





Paint companies .....	4	23	2	....	....	....	....	....	..
Rubber companies .....	1	3	1	3.00	2.00	2.50	2.00	2.00	9
Steel and wire companies .....	2	30	...	3.50	2.00	3.00	...	...	8½
Transfer companies .....	5	142	...	....	....	....	....	....	..
Telephone company .....	1	474	625	....	....	....	....	....	..
Wagon companies .....	2	4	2	....	....	....	....	....	..
Wall paper companies .....	9	45	4	4.00	3.00	3.50	....	....	..
Warehouses .....	10	130	3	....	....	....	....	....	..
Wrecking companies .....	1	10	...	....	....	....	....	....	..
TOTALS .....	640	6,339	3,401	---	---	---	---	---	---
Laundries .....	57	437	839						



[illegible]



MERCANTILE ESTABLISHMENTS—Continued

Cities	Est.	Employees		Wages Paid Per Day <sup>a</sup>			Female		Hours Worked
		Male	Female	Highest	Lowest	Aver.	Highest	Lowest	
Georgetown	3	8	3	...	...	...	...	...	...
Higgins	2	2	0	...	...	...	...	...	...
Hastings	3	15	1	...	...	...	...	...	...
Hugo	6	4	4	...	...	...	...	...	...
Idaho Springs	12	38	15	...	...	...	...	...	...
Louisville	8	21	3	...	...	...	...	...	...
Lafayette	4	20	6	...	...	...	...	...	...
Lamar	13	35	11	...	...	...	...	...	...
Leadville	64	210	54	...	...	...	...	...	...
Loveland	25	71	22	...	...	...	...	...	...
Longmont	12	30	11	...	...	...	...	...	...
Las Animas	2	13	3	...	...	...	...	...	...
La Junta	14	51	15	...	...	...	...	...	...
Littleton	8	32	4	...	...	...	...	...	...
Ludlow	4	17	5	...	...	...	...	...	...
Limon	1	14	0	...	...	...	...	...	...
Laveta	10	18	4	...	...	...	...	...	...
Marble	10	18	5	...	...	...	...	...	...
Montrose	14	36	16	...	...	...	...	...	...

Minturn	1	2	0	...	...	...	...	...	...
Milliken	7	12	1	...	...	...	...	...	...
Mancos	2	8	3	...	...	...	...	...	...
McGuire	1	2	0	...	...	...	...	...	...
New Windsor	9	25	4	...	...	...	...	...	...
New Castle	7	16	3	...	...	...	...	...	...
Ordway	1	3	1	...	...	...	...	...	...
Ouray	6	9	1	...	...	...	...	...	...
Pueblo	225	1,288	524	6.00	1.00	2.50	4.00	...	...
Pierce	7	8	2	...	...	...	...	...	...
Platteville	10	19	5	...	...	...	...	...	...
Portland	1	3	1	...	...	...	...	...	...
Pryor	1	3	0	...	...	...	...	...	...
Piedmont	1	3	1	...	...	...	...	...	...
Rocky Ford	14	32	12	...	...	...	...	...	...
Rifle	15	33	11	...	...	...	...	...	...
Rouse	2	7	6	...	...	...	...	...	...
Rockvale	1	2	0	...	...	...	...	...	...
Ridgway	1	2	0	...	...	...	...	...	...
Radiant	1	2	0	...	...	...	...	...	...
Ravenwood	1	3	0	...	...	...	...	...	...
Salida	50	117	51	...	...	...	...	...	...
Segunda	2	4	0	...	...	...	...	...	...
Sopris	1	7	0	...	...	...	...	...	...

# MERCANTILE ESTABLISHMENTS—Concluded

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BIENNIAL REPORT

Cities	Est.	Employees		Wages Paid Per Day				Female		Hours Worked
		Male	Female	Highest	Lowest	Aver.	Highest	Lowest	Aver.	
Sterling	3	24	9	...	...	...	...	...	...	...
Swink	1	60	0	...	...	...	...	...	...	...
Silver Plume	3	6	0	...	...	...	...	...	...	...
Silverton	9	31	0	...	...	...	...	...	...	...
Strong	1	2	0	...	...	...	...	...	...	...
Starkville	3	11	0	...	...	...	...	...	...	...
Superior	1	3	1	...	...	...	...	...	...	...
Telluride	9	31	6	...	...	...	...	...	...	...
Trinidad	109	613	113	...	...	...	...	...	...	...
Tercio	1	2	0	...	...	...	...	...	...	...
Tioga	1	2	0	...	...	...	...	...	...	...
Tollerburg	2	7	2	...	...	...	...	...	...	...
Walsenburg	42	109	19	...	...	...	...	...	...	...
Weston	1	14	0	...	...	...	...	...	...	...
Woolton	1	4	0	...	...	...	...	...	...	...



## MANUFACTURING ESTABLISHMENTS

(2)

Cities	Est.	Employees		Wages Paid Per Day			Female		Hours worked per day
		Male	Female	Highest	Lowest	Aver.	Highest	Lowest	
Ault .....	2	4	1	...	...	...	...	...	...
Alamosa .....	19	240	1	...	...	...	...	...	...
Aspen .....	11	70	0	...	...	...	...	...	...
Austin .....	2	140	30	...	...	...	...	...	...
Aguilar .....	7	161	0	...	...	...	...	...	...
Anaconda .....	1	18	0	...	...	...	...	...	...
Arvada .....	12	46	7	...	...	...	...	...	...
Argo .....	1	30	0	...	...	...	...	...	...
Buena Vista .....	3	52	0	...	...	...	...	...	...
Boulder .....	33	87	25	...	...	...	...	...	...
Brush .....	8	261	0	...	...	...	...	...	...
Berthoud .....	16	37	5	...	...	...	...	...	...
Brighton .....	12	99	187	...	...	...	...	...	...
Bristol .....	1	12	0	...	...	...	...	...	...
Battle Mt. ....	3	10	0	...	...	...	...	...	...
Bull Hill .....	5	45	0	...	...	...	...	...	...
Beacon Hill .....	1	105	0	...	...	...	...	...	...
Black Hawk .....	4	29	0	...	...	...	...	...	...
Badger Station .....	1	2	0	...	...	...	...	...	...

## MANUFACTURING ESTABLISHMENTS—Continued

Cities	Est.	Employees		Wages Paid Per Day			Female		Hours worked Aver. per day
		Male	Female	Highest	Lowest	Aver.	Highest	Lowest	
Bessemer .....	1	7	1	...	...	...	...	...	...
Breckenridge .....	10	62	0	...	...	...	...	...	...
Broadhead .....	2	69	0	...	...	...	...	...	...
Brookside .....	1	1	0	...	...	...	...	...	...
Berwind .....	1	265	0	...	...	...	...	...	...
Bowen .....	2	274	0	...	...	...	...	...	...
Colorado Springs .....	191	1,434	192	\$5.00	\$3.00	\$4.00	\$2.00	\$1.00	\$1.50
Canon City.....	38	183	38	...	...	...	...	...	10
Carbondale .....	4	445	0	...	...	...	...	...	...
Cokedale .....	2	66	0	...	...	...	...	...	...
Central City .....	8	23	3	...	...	...	...	...	...
Cripple Creek.....	10	84	1	...	...	...	...	...	...
Colorado City .....	6	443	4	5.00	3.00	4.00	2.00	1.00	1.50
Cameron .....	1	3	0	...	...	...	...	...	...
Concrete .....	1	75	0	...	...	...	...	...	...
Cardiff .....	1	40	0	...	...	...	...	...	...
Cheyenne Wells .....	2	3	0	...	...	...	...	...	...
Chandler .....	1	142	0	...	...	...	...	...	...
Coal Creek .....	1	215	0	...	...	...	...	...	...

Cedarhurst	.....	2	195	0	7.50	...	...	...	...
Denver	.....	771	9,964	1,378	.75	...	6.00	.50	1.50
Durango	.....	26	809	12	...	...	...	...	...
Delta	.....	10	25	4	...	...	...	...	...
Delagua	.....	1	496	0	...	...	...	...	...
Dolores	.....	1	2	0	...	...	...	...	...
Downer	.....	1	7	0	...	...	...	...	...
Dacona	.....	1	100	0	...	...	...	...	...
Eaton	.....	4	4	3	...	...	...	...	...
Erie	.....	1	64	0	...	...	...	...	...
Elkton	.....	1	20	0	...	...	...	...	...
Engleside	.....	1	100	0	...	...	...	...	...
Evans	.....	3	5	0	...	...	...	...	...
Florence	.....	19	342	5	...	...	...	...	...
Fort Collins	.....	58	178	26	...	...	...	...	...
Fort Morgan	.....	11	263	18	...	...	...	...	...
Fort Lupton	.....	4	85	53	...	...	...	...	...
Forbes	.....	1	100	0	...	...	...	...	...
Farr	.....	2	113	0	...	...	...	...	...
Frederick	.....	3	116	0	...	...	...	...	...
Firestone	.....	1	10	0	...	...	...	...	...
Glenwood	.....	21	74	3	...	...	...	...	...
Greeley	.....	46	525	46	...	...	...	...	...
Grand Junction	.....	33	329	16	...	...	...	...	...



MANUFACTURING ESTABLISHMENTS—Continued

Cities	Est.	Employees				Wages Paid Per Day			Hours worked	
		Male	Female	Highest	Lowest	Aver.	Highest	Lowest	Aver.	per day
Gunnison	8	5	5	...	...	...	...	...	...	...
Golden	10	124	6	...	...	...	...	...	...	...
Gray Creek	1	4	0	...	...	...	...	...	...	...
Georgetown	4	12	0	...	...	...	...	...	...	...
Goldfield	1	5	0	...	...	...	...	...	...	...
Gladstone	1	13	0	...	...	...	...	...	...	...
Corham	2	7	0	...	...	...	...	...	...	...
Higgins	1	19	0	...	...	...	...	...	...	...
Hotchkiss	1	12	6	...	...	...	...	...	...	...
Hastings	2	296	0	...	...	...	...	...	...	...
Hartman	1	24	0	...	...	...	...	...	...	...
Holly	2	2	0	...	...	...	...	...	...	...
Hugo	5	15	1	...	...	...	...	...	...	...
Idaho Springs	13	52	3	...	...	...	...	...	...	...
Iron Clad Hill	1	5	0	...	...	...	...	...	...	...
Independence	1	60	0	...	...	...	...	...	...	...
Jansen	1	20	0	...	...	...	...	...	...	...
Louisville	6	16	1	...	...	...	...	...	...	...
Lafayette	11	89	2	...	...	...	...	...	...	...

Lamar	16	59	3	...	...	...	...	...	...
Leadville	22	290	5	...	...	...	...	...	...
Leyden	1	275	0	...	...	...	...	...	...
Loveland	39	660	80	...	...	...	...	...	...
Longmont	23	636	14	...	...	...	...	...	...
Las Animas	11	24	0	...	...	...	...	...	...
La Junta	12	460	4	...	...	...	...	...	...
Littleton	13	109	2	...	...	...	...	...	...
Los Angeles Station	1	1	0	...	...	...	...	...	...
Ludlow	1	104	0	...	...	...	...	...	...
Limon	3	15	0	...	...	...	...	...	...
Lester	1	157	0	...	...	...	...	...	...
Monte Vista	4	23	0	...	...	...	...	...	...
Manitou	2	10	0	...	...	...	...	...	...
Marble	4	327	0	...	...	...	...	...	...
Montrose	18	45	5	...	...	...	...	...	...
McClave	1	9	0	...	...	...	...	...	...
Modern Station	1	125	0	...	...	...	...	...	...
Minturn	1	72	0	...	...	...	...	...	...
Milliken	6	7	1	...	...	...	...	...	...
Maitland	1	101	0	...	...	...	...	...	...
Mancos	4	10	0	...	...	...	...	...	...
Morley	2	342	0	...	...	...	...	...	...
Majestic	1	4	0	...	...	...	...	...	...

MANUFACTURING ESTABLISHMENTS—Continued

Cities	Est.	Employees		Wages Paid Per Day			Female		Hours worked
		Male	Female	Highest	Lowest	Aver.	Highest	Lowest	
McGuire .....	1	6	0	...	...	...	...	...	...
New Windsor .....	12	27	3	...	...	...	...	...	...
Ordway .....	3	25	0	...	...	...	...	...	...
Ouray .....	9	23	3	...	...	...	...	...	...
Oakview .....	1	227	0	...	...	...	...	...	...
Pueblo .....	118	4,819	148	6.00	.75	3.00	5.00	.50	2.00 9
Pierce .....	1	2	0	...	...	...	...	...	...
Platteville .....	5	9	1	...	...	...	...	...	...
Paonia .....	3	29	28	...	...	...	...	...	...
Primero .....	1	3	0	...	...	...	...	...	...
Portland .....	2	123	0	...	...	...	...	...	...
Pictou .....	1	209	0	...	...	...	...	...	...
Pryor .....	1	102	0	...	...	...	...	...	...
Piedmont .....	1	195	0	...	...	...	...	...	...
Rocky Ford .....	17	511	9	...	...	...	...	...	...
Rifle .....	7	9	0	...	...	...	...	...	...
Rugby .....	1	165	0	...	...	...	...	...	...
Rouse .....	1	169	0	...	...	...	...	...	...
Rockvale .....	2	391	0	...	...	...	...	...	...

Ridgway .....	2	25	0	...	...	...	...	...	...
Radiant .....	1	72	0	...	...	...	...	...	...
Ravenwood .....	1	162	0	...	...	...	...	...	...
Salida .....	21	581	4	...	...	...	...	...	...
Shoshone .....	2	12	0	...	...	...	...	...	...
Segunda .....	4	175	0	...	...	...	...	...	...
Sugar City .....	2	76	0	...	...	...	...	...	...
Sopris .....	2	329	0	...	...	...	...	...	...
Sterling .....	10	230	6	...	...	...	...	...	...
Swink .....	1	319	1	...	...	...	...	...	...
Silver Plume .....	2	10	0	...	...	...	...	...	...
Silverton .....	13	39	0	...	...	...	...	...	...
Strong .....	1	61	0	...	...	...	...	...	...
Starkville .....	2	360	0	...	...	...	...	...	...
Superior .....	1	2	0	...	...	...	...	...	...
Telluride .....	9	67	2	...	...	...	...	...	...
Trinidad .....	62	596	35	...	...	...	...	...	...
Tercio .....	1	155	0	...	...	...	...	...	...
Tabasco .....	2	98	0	...	...	...	...	...	...
Tioga .....	2	23	0	...	...	...	...	...	...
Toltec .....	11	46	0	...	...	...	...	...	...
Victor .....	16	182	0	...	...	...	...	...	...
Vindicator Junction .....	1	17	0	...	...	...	...	...	...
Valdez .....	1	207	0	...	...	...	...	...	...



MANUFACTURING ESTABLISHMENTS—Concluded

Cities	Est.	Employees		Wages Paid Per Day			Hours worked	
		Male	Female	Male	Aver.	Highest	Female Lowest	Aver. per day
Walsenburg .....	23	595	4	...	...	...	...	...
Wiley .....	2	26	0	...	...	...	...	...
Woolton .....	2	369	0	...	...	...	...	...
Williamsburg .....	2	203	0	...	...	...	...	...

## HOTELS

Cities	Est.	Employees	
		Male	Female
Ault .....	5	0	4
Alamosa .....	13	10	18
Aspen .....	4	6	8
Aguilar .....	6	0	4
Buena Vista .....	2	3	4
Boulder .....	17	75	58
Brush .....	3	2	6
Berthoud .....	2	0	2
Brighton .....	2	0	1
Beacon Hill .....	3	0	5
Black Hawk .....	2	0	3
Breckenridge .....	3	7	5
Colorado Springs .....	69	201	176
Canon City .....	12	13	19
Carbondale .....	1	1	0
Cokedale .....	1	1	3
Central City .....	2	7	4
Cripple Creek .....	24	17	21
Concrete .....	1	0	1
Cheyenne Wells .....	2	2	1
Chandler .....	1	0	0
Denver .....	285	1,157	1,219
Durango .....	9	17	30
Delta .....	2	3	5
Delagua .....	2	4	2
Dolores .....	2	1	1
Downer .....	1	2	2
Eaton .....	2	4	3
Empire .....	1	0	2
Erie .....	1	0	1
Evans .....	2	0	1
Florence .....	8	10	6
Fort Collins .....	16	25	17
Fort Morgan .....	3	8	11
Fort Lupton .....	2	2	4
Glenwood .....	21	64	46
Greeley .....	14	19	30
Grand Junction .....	13	28	22

## HOTELS—Continued

Cities	Est.	Employees	
		Male	Female
Gunnison .....	1	8	6
Granada .....	2	0	0
Golden .....	3	1	2
Gray Creek .....	1	0	2
Georgetown .....	1	3	0
Gladstone .....	2	2	0
Gorham .....	1	0	0
Hotchkiss .....	1	1	6
Hastings .....	1	1	3
Holly .....	4	4	1
Hugo .....	2	5	0
Idaho Springs .....	7	8	4
Louisville .....	6	3	7
Lafayette .....	7	6	9
Lamar .....	8	5	8
Leadville .....	21	13	13
Leyden .....	1	8	4
Loveland .....	4	3	7
Longmont .....	14	5	11
Las Animas .....	4	7	6
Lyons .....	2	1	4
La Junta .....	10	32	32
Littleton .....	1	1	0
Ludlow .....	3	1	0
Limon .....	2	2	6
Lester .....	1	0	1
Monte Vista .....	3	1	5
Manitou .....	42	175	109
Marble .....	3	2	2
Montrose .....	4	3	7
Minturn .....	2	0	0
Milliken .....	1	0	2
Maitland .....	1	0	0
Mancos .....	1	2	1
Morley .....	1	3	0
New Windsor .....	3	0	3
Ordway .....	3	0	4
Ouray .....	3	10	3

## HOTELS—Concluded

Cities	Est.	Employees	
		Male	Female
Oakview .....	1	0	0
Pueblo .....	114	65	75
Pierce .....	3	1	4
Platteville .....	1	0	2
Paonia .....	1	1	5
Primero .....	1	0	1
Portland .....	1	1	0
Pictou .....	1	0	2
Pryor .....	1	0	0
Rocky Ford .....	10	5	7
Rifle .....	1	0	0
Rugby .....	2	0	3
Rouse .....	1	0	1
Rockvale .....	1	1	1
Ridgway .....	2	1	3
Radiant .....	2	1	1
Salida .....	19	24	26
Shoshone .....	4	9	0
Segunda .....	2	0	0
Sugar City .....	2	0	3
Sopris .....	1	0	0
Stanley Lake .....	2	97	0
Sterling .....	5	9	8
Swink .....	1	0	0
Silver Plume .....	3	0	0
Silverton .....	2	4	2
Telluride .....	2	14	6
Trinidad .....	15	50	51
Tercio .....	1	0	1
Tioga .....	2	0	1
Toltec .....	1	0	0
Victor .....	15	7	17
Valdez .....	1	0	1
Walsenburg .....	7	12	16
Woolton .....	2	3	0





Idaho Springs	.....	1	2	4	...	...	...	...
Lafayette	.....	1	1	6	...	...	...	...
Lamar	.....	1	3	3	...	...	...	...
Leadville	.....	4	6	18	...	...	...	...
Loveland	.....	1	3	5	...	...	...	...
Longmont	.....	2	3	8	...	...	...	...
Las Animas	.....	1	1	4	...	...	...	...
La Junta	.....	3	4	10	...	...	...	...
Monte Vista	.....	1	1	4	...	...	...	...
Marble	.....	1	2	1	...	...	...	...
Montrose	.....	1	2	4	...	...	...	...
New Windsor	.....	1	0	0	...	...	...	...
Ouray	.....	1	3	2	...	...	...	...
Pueblo	.....	8	95	294	3.50	1.40	1.75	2.25 .75 1.50 9
Rocky Ford	.....	1	2	7	...	...	...	...
Rifle	.....	1	2	2	...	...	...	...
Salida	.....	2	5	15	...	...	...	...
Sterling	.....	1	3	4	...	...	...	...
Silverton	.....	1	1	2	...	...	...	...
Telluride	.....	1	6	2	...	...	...	...
Trinidad	.....	2	10	25	...	...	...	...
Walsenburg	.....	1	5	7	...	...	...	...

## RECAPITULATION

Number of Establishments Inspected ..... 5,371

	Establishments	Male	Female	Total
Hotels .....	965	.....	.....	.....
Male employes .....	.....	2,309	.....	.....
Female employes .....	.....	.....	2,242	.....
Total employes .....	.....	.....	.....	4,551
Laundries .....	134	.....	.....	.....
Male employes .....	.....	774	.....	.....
Female employes .....	.....	.....	1,490	.....
Total employes .....	.....	.....	.....	2,264
*Manufacturing .....	2,082	.....	.....	.....
Male employes .....	.....	36,002	.....	.....
Female employes .....	.....	.....	2,441	.....
Total employes .....	.....	.....	.....	38,443
Mercantile .....	2,190	.....	.....	.....
Male employes .....	.....	12,086	.....	.....
Female employes .....	.....	.....	5,194	.....
Total employes .....	.....	.....	.....	17,280
	-----	-----	-----	-----
Grand totals .....	5,371	51,171	11,367	62,538

\*U. S. Government Report on Factories in 1909 shows:

    Total Factories, 2,038; gain in 1912, 44.

    Total Employes, 34,115; gain in 1912, 4,328.

## VIOLATIONS OF THE STATE EIGHT-HOUR LAW

In the month of March, 1911, complaints from men working on the county roads of Larimer county were received, that they were required to work nine and ten hours per day, contrary to the state law, which is mandatory in stating that "it shall be unlawful for any board, officer, agent or any contractor or sub-contractor thereof, to employ any mechanic, workingman or laborer in the prosecution of any such work for more than eight hours a day" (3 Mills (Rev.) Stats., 2801a.).

The matter was at once taken up with the county commissioners of that county, and, after some correspondence with them, the following letter was received from the Hon. John J. Herring, county attorney:

“Fort Collins, Colo., May 1, 1911.

“Hon. Edwin V. Brake,

“Denver, Colo.

“Dear Sir—Your letter of the 28th to the Board of County Commissioners has been referred to me for reply.

“I will say that every road overseer in the County of Larimer was notified by letter either the 29th of April or the first of May to, under no circumstances, directly or indirectly, employ labor for more than eight hours per day. I believe that this will end any trouble of this kind in this county. If it does not and you will notify me of any specific violation, I will at once take measures to stop it.

“I write you this letter by direction of the board.

“Yours truly,

(Signed) “JOHN J. HERRING.”

The bureau has received no further complaints from that county.

#### GRAND JUNCTION

September 19, 1911, a complaint was received from Grand Junction stating “the city is working men on the street paving here over eight hours a day; some are working twelve and fourteen hours a day; what can be done to stop it?”

The matter was at once taken up with Mayor Thomas M. Todd and the following reply received:

“Grand Junction, Colo., September 29, 1911.

“Mr. Edwin V. Brake,

“State Labor Commissioner,

“Denver, Colo.

“Dear Sir—In reply to yours of the 20th, in regard to the city and the eight-hour law, will say that it is not our intention to work over eight hours. We would like to on account of the short time before freezing weather will stop us, but fully understand the law and expect to live within it. However, at the start, it seemed that our street commissioner was unable to so line up the finishers on the street paving as to prevent some overtime. We are now starting the finishers (some of them) at noon and they work later and only work overtime when the rain retards the cement and they have to wait sufficiently for them to mark.

“Yours truly,

(Signed) “THOMAS M. TODD,

“Mayor.”

Letter was received from the parties entering the complaint stating that everything was now satisfactory.



## STATE BRIDGE AT RIDGWAY

(Night Telegram)

"Ouray, Colo., April 24, 1911.

"E. V. Brake,  
"State Labor Commissioner,  
"Denver, Colo.

"Party building state bridge at Ridgway working men ten hours. I saw him today. He tried to put the blame on county commissioners, but when I cornered him on that he said that he would work ten hours until we stopped him. Send man or instructions.

"A. M. PRYOR,  
"Secretary, Ouray Miners' Union."

Upon receipt of this, the State Engineering Department was consulted, and it was ascertained that the contract for the erection of this bridge was let to the Missouri Valley Bridge and Iron Company, with general offices at Leavenworth, Kansas. Mr. Charles W. Comstock, State Engineer, however, notified the company to observe the state eight-hour law, and on April 26 the foreman of the men building the bridge at Ridgway notified the department that "we are now working eight hours." (Signed: "C. E. Collins, Foreman.")

## BRIDGE ACROSS GRAND RIVER AT GRAND JUNCTION

February 7, 1912, a complaint was received from Grand Junction that the Patterson Bridge Company, of Denver (Mr. J. J. Lumsden, subcontractor), was building a state or county bridge across the Grand River, and that the employes were working ten hours a day. Mr. Lumsden was communicated with on the subject, when representatives of the Patterson Bridge Company called at the office of the bureau and stated that they were unaware of the violation of any state law, but would immediately comply with the law. No further trouble has occurred in this matter.

## PAONIA ELECTRIC LIGHT PLANT

August 12, 1912, a request was received from Paonia people to have the electric-light plant of that town obey the eight-hour law regarding the hours worked by employes. The matter was taken up, the town officials being communicated with, and on August 27 the following letter was received:

"Paonia, Colo., August 27, 1912.

"Mr. E. V. Brake,  
"Labor Commissioner,  
"Denver, Colo.

"Dear Sir: Upon my return to Paonia after an absence of several days, I find your letter of the 13th, and in reply to the same wish to say that we are just completing the installation of

a new unit in the plant, and in a few days, as soon as it is in running order, will start a twenty-four-hour service and put on three eight-hour shifts, which will, I think, conform with the law.

"I take it the complaint you speak of is in regard to the engineer, as this is the only employe I have that is working over eight hours, save a lineman who only works over eight hours when an emergency comes up, and then allowance is made on the next day.

"Assuring you of my desire to comply with the law and to co-operate with you in every way, I am,

"Yours very truly,

(Signed) "V. P. RAWALT,  
"City Electrician,  
"Water Commissioner."

The parties making the complaint notified this office that matters had been satisfactorily adjusted, with thanks for the prompt action taken.

#### BOULDER CITY WATERWORKS

In the latter part of June and in July, 1911, several complaints were received that the Boulder waterworks officials were violating the eight-hour law, and also that men who were hired to work there were not receiving fair treatment. On July 13 a letter was addressed to the city engineer of Boulder, reciting these complaints and requesting a compliance with the law and fair treatment for the men engaged to work on the Albion dam, to which the city engineer replied as follows:

"Boulder, Colo., July 22, 1911.

"Mr. Edwin V. Brake,  
"Deputy Labor Commissioner,  
"Denver, Colo.

"Dear Sir: Yours of the 13th inst. at hand and contents noted. In reply would say that the city of Boulder has no disposition to violate the labor laws either in letter or spirit. The Albion dam, where the city is working, is situated at an altitude of 11,000 feet, and the season is very short at the best. All the men are hired and paid on an eight-hours-a-day basis. No man is required to work more.

"We have installed an expensive plant of machinery, and if we do not finish this season it will cost a large sum of money to house and store this plant. For this reason we have been putting in all the time possible. No man is required to work overtime even, and only the absolute necessity of the work leads us to ask anyone to work overtime.

"I am a firm believer in an eight-hour day, even aside from the law in question. Will say that just as soon as we finish our installation it is our intention to put on two shifts of eight hours

each, but in handling the heavy machinery and tuning up the plant it did not seem advisable to divide the shifts yet.

"In regard to sending the men up and not putting them to work, will say that it happened *once*, and we regretted it as much as anyone; but there was no intention of deceiving the men, and circumstances over which we had no control were responsible for this occurrence. I have now inaugurated a system whereby men get tickets from my office entitling them to work, and these tickets are honored on the job.

"We pay top wages and try to run a good camp and treat the men right. Hoping that this is satisfactory, I am,

"Very truly yours,

(Signed) "FRED R. DUNGAN,  
"City Engineer."

No further complaints were heard, either of treatment of the men or of violation of the eight-hour law.

#### STREET-CAR VESTIBULE AND EIGHT-HOUR LAW AT COLORADO SPRINGS

"Colorado Springs, Colo., April 30, 1912.

"Hon. E. V. Brake,

"Deputy Labor Commissioner,

"Denver, Colo.

"Dear Sir: In compliance with your orders to investigate the reported violation of the street-car vestibule law and the eight-hour law, I desire to report as follows:

"The Colorado Springs Interurban Railway was using cars with vestibule at one end of the car only. Owing to the fact that the streets of this city are being paved, the loop around which the cars turn could not be used, and the motorman has to change ends in operating the car, thus exposing him to the element one way of a round trip.

"I discovered that the company had cars that are vestibuled at each end, unused in the barn, and I ordered Superintendent Lothrop, of the street railway, to comply with the law and use these cars. He promised to comply the following morning, and failed to do so. Before proceeding further, I deemed it best to take up the matter with Dr. Rice, one of the executors of the Stratton Estate, owners of the railway. I requested him to install the cars at once. He did so within an hour, without further friction.

"As to the reported violation of the eight-hour law relative to municipal work by the city of Colorado Springs in its paving work, I found on investigation that the law was being violated, that the men were working over eight hours a day, and took up the matter with Commissioner Lawton. He said that he would see the contractors at once, which he did, and they promised to comply strictly with the law. In order to see that



the law was complied with to my satisfaction, I continued to investigate for three days further, and can report that the promise was kept, the men were working only eight hours.

“Respectfully submitted,

(Signed) “FRED WEINLAND,

“Deputy Factory Inspector.”

#### NORTH DENVER SEWER CONTRACT

“Denver, Colo., March 21, 1912.

“Hon. E. V. Brake,

“Deputy Labor Commissioner,

“Denver, Colo.

“Dear Sir: In compliance with your orders of March 12 to investigate the conditions of the workmen on the North Denver sewer, I beg leave to submit the following report:

“I went to this place and found work going on in two different alleys, under the supervision of the Commonwealth Construction Company. One of these jobs was about finished, the tile being laid. In talking with the men on this job, I found them to be perfectly satisfied both with the time they worked—eight hours—and their wages. I then went about a block south of there and found another gang of men working. The first man I approached had been working piece work most of the winter, and stated to me that the most he had made in any one day of ten hours was \$1. This the foreman of the job contradicted immediately, stating that out of the thirty men working all were perfectly satisfied except two, and would rather work piece work than day work. The man then replied that he knew fifteen men out of the thirty were dissatisfied and were only making \$1 a day. I then asked one of the men whom the foreman cited as being perfectly satisfied with the piece-work system, how long it would take him to dig a portion of the trench, twenty-one feet long, eight feet deep, and two feet wide. He said that, if the ground was in the condition that it was then, it would take him about two days to dig it. While talking with this man, another man came up, who was asked the same question, and he said it would take him about four days, as he had been working now on a piece of trench about the same length, and that he had only got down four feet.

“Two of the men, Oscar Newberg and Karl Blumberg, were forced to quit for the reason that they could not make enough money to pay their board. Their average, they said, was 50 cents a day. In three and a half days' work they had drawn in pay \$2.25.

“Of all the men I talked to I only found about one-third who were satisfied.

“Respectfully submitted,

(Signed) “GEORGE R. HOWE,

“Deputy Factory Inspector.”



“Denver, Colo., March 21, 1912.

“To the Board of Public Works,  
“City Hall,  
“Denver, Colo.

“Gentlemen: Inclosed I submit you a copy of the report that has been made by my assistant whom I sent to examine and report upon the condition under which the men were working on the North Denver sewer.

“I understand that the law, as per the provisions of the charter of the city of Denver, has been, and is being, violated repeatedly in the matter of the subletting of contracts, and also that the state eight-hour law, applying to state, county, and municipal work, is, to my knowledge, repeatedly being violated. I intend to prosecute all such violations, and expect to have the co-operation of your honorable body in this work.

“Very truly yours,

(Signed) “EDWIN V. BRAKE,  
“State Labor Commissioner.”

“Department of Public Works,  
“City and County of Denver, March 25, 1912.

“Hon. Edwin V. Brake,  
“Deputy Labor Commissioner,  
“State Capitol, Denver.

“Dear Sir: In reply to your letter of the 21st inst., enclosing a report by Mr. George R. Howe, respecting labor conditions on the ‘North Denver sewer,’ now being constructed for the city under contract, I am desired by the board to note that you will prosecute any violation of the contract in the matter of subletting or of the state eight-hour law, applying to state, county, and municipal work.

“This board has been, and still is, using its best endeavors to obtain evidence relating to the same, and so far has been met with a flat denial on the part of the contractors of any violation of contract, ordinances, or statute.

“The Board of Public Works finds it difficult to take a definite stand on questions of disputed fact which can only be ascertained by a court of law. Therefore it will gladly place at your disposal all the information and documents it possesses, and begs to assure you that it will countenance no infraction of contract, ordinance, or statute.

“I am,

“Yours very truly,

(Signed) “HENRY READ,  
“President.”

Considerable time was spent by members of the Labor Department on the case cited above. Many times different deputies waited upon Mr. Read and the Board of Public Works, until the law and ordinances were observed by the contractors, and a minimum scale of 25 cents an hour obtained for the workmen.

#### VIOLATIONS OF EIGHT-HOUR LAW IN DENVER

With few exceptions, it is well known that the contractors and subcontractors on public works in Denver are notorious for violating the eight-hour law. The subject of prosecutions for these violations is a matter for the district attorney's office to handle, and since the time when a deputy district attorney appeared before Justice C. J. Gavin and ordered nolle prosequi a number of complaints that were then before the court, with numerous witnesses to testify to the same, it has been deemed almost impossible to attempt prosecutions with success. I am in hopes that a different order of things will come with different officials in this office of district attorney, and that the Labor Department will have its hands strengthened in the matter of prosecutions for violation of labor laws.

Numerous complaints were constantly made of these violations, and it has been the policy of the office to investigate them. The complaints were found to be true in nearly every instance, and the contractors were warned to obey the law, which they did for a few days, or until they were pretty sure that members of the Labor Department were no longer watching them, when the regular order of working nine and ten hours a day would again commence.

It has been impossible, with the force in the department, to detail members to attend to this work at all times, as other work and other duties, which the law prescribes they shall perform, had to be attended to. But, with the limited time at the disposal of the deputy factory inspectors and others, it has been the policy of the office to enforce the eight-hour, and other laws enacted for the protection of the wage-earners, as much as was possible.

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#### DEPUTY STATE FACTORY INSPECTORS REPORTS

##### ACCIDENTS, MINE SCALES, AND VIOLATION OF STATE LAWS

In the early part of October, 1911, it was reported that a boy had been killed at the Brook and Harrison Mine, located near Louisville, and that the child-labor law was being violated at this mine. Deputy Factory Inspector Frederick Weinland was sent to investigate the matter. His report and the report of the coroner's jury follow:

"Denver, Colo., October 9, 1911.

"Hon. Edwin V. Brake,  
"State Labor Commissioner and Chief Factory Inspector,  
"Denver, Colo.

"Dear Sir: In compliance with the orders of Mr. R. E. Croskey, State Statistician and acting in your absence, to be present at the coroner's inquest at Louisville over the body of Edgar Vigers, who was killed by falling down a mine shaft, and to investigate any violations of the child-labor law, I will say that the boy was not employed there, and that it was purely accidental.

"His father took him with him on the cage to start the pumps. The night engineer was under the impression that the cage was at the bottom of the shaft. Instead it was at the surface landing, and he started the cage upwards. When they arrived at the coal shoot above, Mr. Vigers jumped and called to his boy to jump. It was dark at the time, and Mr. Vigers could not see the boy, but was under the impression that he tripped and fell down the shaft. The back of the boy's head was crushed and his spinal column broken, causing instant death. The father had been cautioned about taking the boy on this cage by Mr. Brooks, president of the company, but paid no attention to it.

"It is a question in my mind whether the night engineer is a qualified engineer or not, and he was directly responsible for the accident. I would suggest that the Coal Mine Inspector, Mr. Dalrymple, have the coal company comply with the state laws on its signal system, and by providing a better light on its indicator. I enclose a copy of the coroner's verdict, and trust this will be sufficient.

"Very respectfully yours,

(Signed) "FRED WEINLAND,  
"Deputy Factory Inspector."

#### CORONER'S VERDICT

"That the said Edgar Vigers came to his death at the Brook and Harrison Mine, located about a mile south of the town of Louisville, Boulder County, Colorado, on Thursday, October 5, 1911, on or about 6.30 p. m., by falling down the shaft. Caused by the negligence of the engineer in not looking at indicator before starting cage.

(Signed) "H. A. MOORE,  
"D. M. MORGAN,  
"FRANK MALONE,  
"W. O. McCULLOCH,  
"H. BALL,  
"FRANK HAMILTON,  
"Jurors."



## ACCIDENT AT LANTZ SANITARY LAUNDRY, DENVER

“Denver, Colo., May 17, 1911.

“Hon. Edwin V. Brake,  
“State Labor Commissioner,  
“Denver, Colo.

“Dear Sir: In compliance with your orders to investigate the accident that occurred at the Lantz Sanitary Laundry, I have to say: Young Mr. Lantz was in the act of placing the belt on the upper pulley that connected with the washing-machine, when his sleeve was caught with a coupling. He was thrown over the shaft and was injured—physicians think internally. No bones were broken, but he had some burns. It was not necessary for the young man to get on top of this washing-machine, as they have a contrivance for replacing these belts. Loose pulleys are provided on the machine, but no belt shifters could be used. Mr. Lantz, Sr., informed me that he had cautioned his son not to get on these machines, and he blames the boy for his own carelessness.

“I issued the following orders in the presence of Engineer Bass, and was informed that they would comply with them immediately: Cover couplings with hoods; countersink set screws on rotary dryer; place two covers on extractors; put new rubbers on small extractor to keep from wobbling; cut off end of shaft, and protect all belts on end machines; also fix fastener on starch machine, and tighten belt on rotary machine.

“Respectfully submitted,

(Signed) “FRED WEINLAND,  
“Deputy Factory Inspector.”

## ACCIDENT AT BELVEDERE HOTEL, DENVER

“Denver, Colo., June 1, 1911.

“Hon. Edwin V. Brake,  
“State Labor Commissioner,  
“Denver, Colo.

“Dear Sir: In compliance with your orders to investigate the accident that occurred at the Belvedere Hotel, Fifteenth and Glenarm Streets, Denver, I report:

“Ed Welsh, colored janitor at the hotel, was preparing to wash the windows on the top floor of the hotel. He had removed the screens and was standing on the upper balcony of the fire-escape. The supposition is that, after he had removed the screens from the windows, his attention was attracted to the alley below. He stepped to the outer edge of the landing of the fire-escape, lost his balance, and grasped the live wire of the Denver Gas and Electric Company, in which the insulation had worked off. I find in almost all cases of the said company that they string their



wires too close to fire-escapes for safety. I also find that they place their electric switch-boxes too close to fire-escapes, and in a great many cases directly under the escapes. I would suggest that the company be notified to string their wires at a greater distance from the escapes, and in no case place electric switch-boxes near escapes.

“Respectfully submitted, -

(Signed) “FRED WEINLAND,  
“Deputy Factory Inspector.”

NOTE.—The above recommendations were made, and the matter taken up with proper authorities for compliance.

#### EXPLOSION IN COAL MINE AT HASTINGS

“Hastings, Colo., June 20, 1912.

“Hon. Edwin V. Brake,  
“State Labor Commissioner,  
“Denver, Colo.

“Dear Sir: I came here as per your orders on first train out of Pueblo. I found that there had been an explosion in the Victor-American Fuel Company's mine at this place, and that twelve men out of thirteen had lost their lives. One, severely burned, had been taken to the hospital at Trinidad. All the bodies had been located by 7 o'clock p. m. yesterday, and seven had been taken out when I arrived here.

“Everything possible was being done to get the bodies out, and the last one was taken out about 3 o'clock this morning. We are trying to find out the cause of the explosion.

“Saloons in the town are closed, and everything seems to be managed in perfect order. The force of the explosion tore up the stope, so that the bodies had to be brought up through the air-shaft, which made it very difficult and tedious work. However, the company did everything possible for a quick removal of the dead. The only thing that looked bad was in the fault of Mr. Sipes, the undertaker and deputy coroner, who allowed the bodies in the caskets to lie out in public view of everyone, in the broiling hot sun, from 5 o'clock a. m. until 9.40 a. m., when Marshal Caskey put them in the temporary morgue. State Coal Mine Inspector James Dalrymple and deputies are here, doing all possible for them to do.

“Yours truly,

“LEROY MONICAL,  
“Deputy State Factory Inspector.”

NOTE.—Full report of this explosion and its causes can be found in State Coal Mine Inspector Dalrymple's biennial report.

## INSPECTION OF WEIGHTS AND SCALES AT COAL MINES

Many reports were received by the department of scales at coal-mine tipples being defective, and numerous miners claimed that they were being defrauded by getting short-weighted on their coal mined. It should be understood that coal-miners are paid on the tonnage basis—so much per ton for coal mined. Deputy factory inspectors were instructed to examine into these complaints when inspecting surface workings around coal mines. The department has no jurisdiction under ground, that belonging properly to the duties of the mine inspectors, coal and metal. Deputy Factory Inspector Leroy Monical, who was assigned the Southern Field, reports as follows:

“Colorado Fuel and Iron Company’s mine at Starkville: I find that they have a check weighman, and scales are all right. Most of the machinery unprotected. Have ordered it protected.

“McLaughlin Bros.’ mine: I find scales O.K., and they are willing to obey all laws. New mine just opened up, March 20, 1912.

“March 21, 1912—Wooten Land and Fuel Company, two mines situated close to New Mexico line on the Santa Fe Railroad: I find the scales at the Wooten mine unbalanced, and scales at the Turner mine very unfair to the miners. They could not be balanced, and, on weighing a car of coal, the weight of three men weighing 450 pounds only increased the weight of the car fifty pounds. Scales seemed to be binding. They were inspected by the county inspector.

“March 22, 1912—Colorado Fuel and Iron Company’s mine at Morley: Has no check weighman. Find the miners complaining of weights. On inspecting two pairs of scales, I find that neither will balance, and that the scales on the south tipple with 350 pounds increased the weight of a car of coal only fifty pounds. This is very unsatisfactory to the miners, who claimed that if they asked for a check weighman they would be discharged. This is disputed by Mr. Harrington, the company attorney at Denver.

“March 25, 1912—Suffield mine at Bowen: Find scales in perfect condition, able to balance and weigh myself correctly. Everything satisfactory in that line.

“At the Victor-American Fuel Company’s mine at Bowen I found no check weighman, and scales in poor shape; could not balance, but was told by scale man that at three different times he tallied in weights with the railroad scales; which was possible—he weighing both.

“March 26, 1912, Tollerburg—Cedar Hill Coal and Coke Company: Found mine in good condition and scales in perfect order, and men well satisfied.

“At the C. F. & I. Co. mines at Berwind and Tobasco I was positively refused to be allowed to examine the scales, and was



told that I had nothing to do with them. I found the mine policed by a gun man, ready to run anyone out of town that did not suit him.

"March 27, 1912, Ludlow—Cedar Hill Coal and Coke Company: Find everything in good shape except the scales; they are broken. The company not weighing the coal at all for one week.

"Delagua—Victor-American Fuel Company's mine: Working good force of men. Was told it was an open camp, but found gun men ready to exile all undesirables, and was not allowed to test the scales. March 28, found the same conditions existing at Hastings, but was overlooked by the marshal, who failed to see me enter town.

"April 12, 1912: Have been inspecting at Trinidad; now back in the coal fields. First mine inspected was the Rocky Mountain Fuel Company's mine at Piedmont. Find things in good condition and paying the men by the car. The superintendent has worked nine years for the company and is well liked by the men.

"April 13, 1912: Inspected C. F. & I. Co. mine at Sopris. Found everything in very poor condition; no handrails on stairways. Was refused permission to examine the scales, as they belonged to the Western Weighing Association, and they are inspected by them, but they will protect all machinery as ordered according to the law.

"April 15, 1912, Tercio: At the C. F. & I. Co. mine and coke ovens the conditions were about the same as at Sopris, April 16. At Primero and Valdez things were about the same.

"April 17, 1912, Segundo—C. F. & I. Co. washer and coke ovens: Have no mine or scales. I found the machinery unprotected, and stairways without handrails, and the superintendent refused to give the number of men working. Have ordered machinery protected, etc.

"April 18, 1912, Coke Dale—Carbon Coal and Coke Company: Found most of the machinery protected and the company willing to do anything they were asked to. Superintendent Bayles asked me to inspect the scales and, if anything was wrong, to tell him, and he would have it fixed immediately, as they are anxious to have perfect harmony with their men, and that at any time he would be glad to have Mr. Brake visit his camp.

"April 19, 1912, Majestic—One of the C. F. & I. Co's mines: Found the scales in perfect condition; are working about 100 men.

"At Forbes, one of the Chicosa Fuel Company's mines, found men satisfied and being paid by the car.

"April 22, 1912, Ludlow—Ramey mine of the Huerfano Coal Company: Find the men are having trouble getting the increase of pay promised. Was invited to attend a meeting called by the

men and held on the open prairie. They asked my opinion, and I gave it; but I am of the opinion that there is likely to be a strike called, unless conditions are adjusted.

"April 19, Forbes Junction—Chicosa Fuel Company's mine. Found scales O.K.

"April 22—Huerfano Coal Company: Find men satisfied and scales all right.

"April 26—Southwestern Fuel Company, Rapsen mines; Primrose Coal Company, and Rugby Fuel Company: Find that these mines are only working from one to two days per week. Are giving good weights.

"April 27—Ryval Mine, Victor-American Fuel Company: Was not allowed to see scales.

"Ideal Fuel Company's mine pays miners by the car; satisfactory.

"Empire Fuel, Royal Fuel, Rider Coal, National Fuel and Alto Fuel Companies' mines: Find them working about half-time, and scales correct.

"May 10-12, 1912—mines around Walsenburg: Loma Fuel Company's mine working few men.

"Robison mine, of the C. F. & I. Co.: Find they have marshal and closed camp. Mine is working a large force of men.

"Walsenburg Fuel Company, Breen Coal Company, Huerfano Coal Company, Black Canon Coal Company: Mines are working every day and giving the men satisfaction on weights; scales correct.

"May 14—Big Four Coal and Coke Company, Minnequa Coal Company, and Sunnyside Coal Co: Find scales in good condition and men satisfied. Found two boys working at the Sunnyside mine. The superintendent, being told that they were under age and could not work, laid them off immediately.

"May 15—Maitland: Not allowed to examine scales at Victor-American Fuel Company's mine. Scales correct at Rocky Mountain Fuel Company's mine.

"May 16—Gordon Coal Company: Working boys under sixteen years of age; had them laid off immediately. Found scales correct; also scales correct at New Maitland Coal Company's mine, and Rocky Mountain Coal Company's mine near McGuire.

"May 16—Pictou: C. F. & I. Co.'s mine visited. Was told by Mr. Manley, superintendent, that the Pictou mine was one mine that I could not inspect; that he was running that mine, not the State of Colorado, and the only way I could inspect that place was to get a special permit from Mr. Weitzel, the general superintendent at Pueblo, which I did the next morning. Mr. Manley met me the next morning and apologized profusely, saying that he had made a mistake; that it was the scales that I could not



inspect, which I did not. This is one of the finest mines in this district.

"May 18: Visited C. F. & I. mine at Lester. Only working three days a week. Could not examine the scales.

"May 19: Inspected C. F. & I. mine at Rouse. Was positively refused to be allowed to examine the scales.

"May 21: Inspected C. F. & I. mine at Cameron. Only working half-time. Could not see scales. National Fuel Company's mine: Scales were correct. Victor-American mine at Ravenwood: Working half-time; not allowed to inspect the scales. Union Coal and Coke Company's mine at Pryor: Scales were correct.

"May 28: Inspected the Oakdale Coal Company's mine at Oakview. Find D. W. Jones, superintendent, with strict orders from the general superintendent of company to pay the miners for every pound of coal mined, which he does. I saw cars of coal weighed that ran as high as 4,600 pounds; at some other places they possibly would have weighed 3,500 pounds. The scales at this mine are in perfect order."

This finishes Inspector Monical's report on the Southern fields.

"Florence, Colo., June 26, 1912: Inspected Victor-American Company's mine at Radiant. Examined the scales and found them correct. Emerald mine at Williamsburg and Hubbard mine: Found scales correct. C. F. & I. Co.'s Fremont mine was not working on the day of inspection to any great extent; only mining steam coal for boilers. Was told by the superintendent that I could examine everything but the scales, but after I had gotten through with everything else, the superintendent accompanied me to the tipple, and we examined the scales and found them correct. C. F. & I. Co.'s mine at Coal Creek not working; not allowed to examine the scales. Same company's mine at Rockvale working full force of men on day of inspection; not allowed to examine scales.

"July 9-12—Canon City: Central Coal Company, Little Brothers mine: Find the shaft 1,100 feet deep, with no gates on shaft on top of the ground. Sinking air-shaft. Tipple in bad shape. Decking no good; not safe for men to work on. Ordered new decking and rails on the same. Scales I found correct.

"Chandler mine of the Victor-American Fuel Company: Working good force of men few days a week. Balanced scales and found them all right. Brookside mine: Only working seven men; all machinery taken away. No Nack, C. F. & I. Co.'s mine: Shut down for the past four years; working six or seven men timbering up, and keeping dirt and rock out of the way.

"This concluded my report on coal mines.

"Respectfully submitted,

"LEROY MONICAL,  
"Deputy State Factory Inspector."

## REPORT OF INSPECTOR HOWE ON PATTERSON MINE

Denver, Colo., December 4, 1912.

Hon. Edwin V. Brake,  
Deputy Labor Commissioner,  
Denver, Colo.

Dear Sir: In compliance with your orders, I went to Colorado Springs to investigate the scales at the Patterson mine. On making as thorough an investigation as was possible, I found the scales, as I believe, in first-class shape. It seems that the men have complained before, and that the county inspector of scales had been to the mine and inspected the scales, and pronounced them as but two pounds out. The men evidently were not satisfied with this inspection, and wanted one made with weights, which, as you know, we are unable to do, having no provision in our law for the same.

The mine management has no agreement with the union, but I found that all the men working were union members.

A committee of the men waited upon me and I explained to them what I found, advising them that I found the scales in good condition, and that if there were any inaccuracies at any particular weight, it would be advisable to get an expert scale-repairer to examine the scales.

Respectfully submitted,

GEORGE R. HOWE,  
Deputy State Factory Inspector.

## REPORT OF GEORGE R. HOWE ON OCEAN WAVE MINE

Pueblo, Colo., January 13, 1912.

E. V. Brake,  
Labor Commissioner,  
Denver, Colo.

Dear Sir: I have been to the Ocean Wave mine, near Florence, and have made a thorough inspection of the scales; also all other parts above ground. I found that the scales were balanced perfectly, and that the weights are solid and cannot be loaded. I tested the smaller weights by weighing myself, and found that the weight was about one-half pound more than my weight showed here. I believe that the whole trouble is in the loose manner in which the coal is weighed, as I saw the weigh-master weighing cars as they passed over the scale without stopping. I believe that it would be a very easy matter for him to make a mistake of 100 pounds in weighing 2,400 or 2,800 pounds, as that was the amount of two cars that were weighed standing still.

They have a bonus system at this mine, which is as follows: They claim to pay 90 cents mine-run, and for every fraction over



55 per cent of each load that is lump coal they pay the miner 1 cent extra. For example, if a load of coal should run 60 per cent lump, the miner would be paid 95 per cent mine-run for that load. Each man's car is dumped and screened, and the lump coal weighed as it goes into the car on the track. I saw two cars screened and out of a total of about 1,400 pounds, 1,000 pounds was lump. It appears to me that the men can be cheated out of a great deal in a day, if they don't have a check weighman.

There is plenty of time for each car to be weighed very accurately, but that is not done. The average miner will mine ten to fourteen cars per day, and they will run from 1,400 to 1,800 pounds to the car; so, if a mistake of 100 pounds was made on each car, they would lose one-half ton or more a day.

There is quite a bit of work to be done here, but we will clean up as soon as possible.

Very respectfully,

(Signed) GEORGE R. HOWE.

REPORT ON EMPIRE AND GREEN CANON MINES

Denver, Colo., April 13, 1912.

Hon. Edwin V. Brake,  
Deputy Labor Commissioner,  
Denver, Colo.

Dear Sir: In compliance with your instructions to investigate the trouble at the Empire and Green Canon mines at Aguilar. I submit the following report:

I found that it was reported by the men that Mr. Seiple, of the Empire mine, had refused to allow a check weighman, as the law provides. Talking with him about this matter, he denied making any such statement, and informed me that the men could have at any time a check weighman, provided this check weighman was selected from one of the employes of the mine. This matter I then left with the miners, who were instructed to call a meeting and take it up with Mr. Seiple the next morning. As they did not telephone me that he had refused their demands, I concluded that a check weighman had been put on; this being the arrangement made between the miners and myself.

I was informed by the miners that Mr. Dahlby, superintendent of the Green Canon mine, had discharged three committeemen who had asked him to put such check weighmen on. I interviewed Mr. Dahlby about this, and he informed me that two of the men who were discharged were not on the committee. In fact, one of the men, who claimed he was discharged, had quit work of his own accord two days before. One man who was on the committee was discharged for not working. The superintendent claimed that he was not to be depended upon. The other man who claimed he

was discharged had never been to the superintendent in the capacity of a committeeman at all. In fact, Mr. Dahlby stated that it was the first intimation that the man—Mr. Lloyd—was on any committee to wait upon him. He had been discharged for laying off at will, when men were needed. One of the committeemen, Mr. Dahlby informed me, was a good, steady worker, and was still at work in the mine. The other committeeman was the man layed off for not working steady. These two were the only men that waited upon him.

Mr. Dahlby takes the same stand as Mr. Seiple in regard to who shall be appointed as check weighman, they claiming that it must be one of the employes of the particular mine where the check weighman is wanted.

As I have found that there were men working at the respective mines whom the miners considered competent, I instructed them to choose a check weighman from one of their number, and report if results were unsatisfactory.

Respectfully submitted,

(Signed) GEORGE R. HOWE,  
Deputy Factory Inspector.

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#### LAUNDRY AT THE HOUSE OF THE GOOD SHEPHERD

Denver, Colo., April 18, 1912.

Hon. Edwin V. Brake,  
Deputy State Labor Commissioner,  
Denver, Colo.

Dear Sir: In compliance with your orders to investigate conditions at the laundry of the House of the Good Shepherd, I submit the following report:

Upon investigation I find that it is one of the best-guarded laundries in the city. The employes of the wash-room are all men, full-grown; the other employes are inmates—girls—of the home.

The mother superior informed me that on Monday mornings she has had girls as young as thirteen years of age at work as early as six o'clock. These girls would work until seven o'clock, when they would have breakfast, with an hour for recreation.

The younger girls are in the school in the morning as a rule, and do not work until after twelve o'clock, and then only until three in the afternoon, at which time they are given a lunch and a rest. She also informed me that she was not aware of the existence of the child-labor law, which does not allow children under the age of sixteen to work before seven in the morning and after eight o'clock in the evening. She assures me that in the future she will have no children violating this law.

I also find that this is a charitable institution. There are 321 girls. The receipts for tuition for these are only \$417, making



an average of slightly over one dollar for each girl confined in the home.

With this money, and that which is made from the receipts of the laundry, these girls—or at least a great many of them—are fed, clothed, and educated. The laundry is used more as an education for the girls than for profit. There is twice the amount of help for each particular operation that there is in an ordinary laundry. For instance, on the shake-table, where the ordinary laundry employs three girls, there are six at this place doing the same work. Their prices for work compare very favorably with those of other laundries; in fact, are higher for flat work, 50 cents per hundred being the cheapest work they take.

The mother superior informs me that as soon as they move to their new home they will discontinue doing flat work, except as it comes from homes or family washings, as she says it is only done for the education of the children.

There are more than enough girls to do the work in the laundry; so the work is divided as equally as possible, in order that they may all receive instruction. For this reason, they are working very short hours at this time, and when the removal is made to the new home it is the intention of installing several other methods of teaching the girls various other occupations.

Respectfully submitted,

GEORGE R. HOWE,  
Deputy Factory Inspector.

The above investigation was ordered at the request of a committee of the Denver Trades Assembly, and the report of Inspector Howe sent to it. It was reported that the state laws were being violated at this place.

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#### VIOLATION OF ANTI-COERCION ACT

Colorado Springs, Colo., June 8, 1912.

Hon. Edwin V. Brake,  
Deputy Labor Commissioner,  
Denver, Colo.

Dear Sir: In compliance with your instructions to investigate the alleged violation of the anti-coercion law at Colorado Springs, I find that Mr. W. A. Dierolf, secretary of the Master Painters' Association, in the *Rocky Mountain News* of April 21, 1912, caused to be printed the following: "Men Wanted—Painters and paperhangers wanted by Master Painters' Association, W. A. Dierolf, secretary, 817 North Cascade Avenue, Colorado Springs." He failed to state that a strike existed, thus violating the false advertising law, which constitutes a violation of section 1 of that law, inasmuch as he failed to state that there was then existing a strike of the painters and paperhangers at this town.

I called upon Mr. A. E. Lower, of the Painters' Union, who lodged the complaint, and requested him to swear to an affidavit to be drawn up by the district attorney's office. This he refused to do, giving as his reason that he did not want to be the goat all the time. He tried to make me believe that it was our duty to swear to the affidavit; but knowing only from hearsay that a strike existed, and not being able to swear that Mr. Dierolf caused the advertisement to be printed during this lockout or strike, I refused to swear to the information. The Painters' Union all seemed to be very anxious that Mr. Dierolf should be prosecuted, but none were willing to swear to the information, and, after putting in the bigger part of the week, I finally succeeded in getting Mr. Butler, the president of the union, to swear to the information. I turned the affidavit and the warrant for Mr. Dierolf's arrest over to Mr. Butler, with the understanding that he was to file it June 8 in Justice Dunnington's court. I was informed by Assistant District Attorney Martin S. Burns that my presence was not necessary. The matter could have been adjusted much quicker had I not experienced the difficulty in getting signature to the complaint. I trust this will meet with your approval.

Respectfully submitted,

(Signed) FRED WEINLAND,  
Deputy Factory Inspector.

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#### WAGE COLLECTION

The collection of wages due employes from employers, who for numerous causes are unwilling to pay, is a great portion of the work of the office force. This and the giving of advice, legal and otherwise, can be said to entirely take up the time of one person. This work was not contemplated in the law creating the Bureau of Labor Statistics, and indeed there is no warrant of law for it, and no way in which the department can enforce the payment of wages due, regardless of how just the claim may be. However, to correct injustices to those who labor for a living, this work was certainly implied in the law creating the department, and it has been cheerfully taken up, and by moral persuasion—our only weapon—the sum of \$37,961.05 has been collected in the last two years. When it is considered that the major portion of these claims is for small sums, the amount of work required to collect this amount can be readily seen. There were no less than 1,546 claims taken up by the department, but this does not begin to number the amount of people who have called upon the office for assistance in this way. It is true that many complaints registered are unjust to the employer, and upon investigation it is usually shown that the difference arises either from a misunderstanding of the terms of employment, or from



a lack of knowledge of the rights of both parties. It is a common practice for unorganized laborers to make claims for overtime worked, and which should in justice be due them, but they have made no contract, when engaging for work, as to the number of hours per day they should work or the number of days in a week, which leaves them entirely at the mercy of the employer in this matter. This is only one of the many instances that are daily occurring wherein the department is compelled to instruct these people in the making of contracts, or agreements with employers, and inform them that, while they have a moral claim for the overtime wages due, they have no legal claim whatever and the department is unable to do anything to relieve them.

There is a small class of what may be termed, shiftless "ne'er-do-wells," who claim the attention of the department with preposterous claims which upon investigation are found to be without merit; but these should not be allowed to detract in any particular from the hundreds of just claims from honest working people. Some provisions should be made for legalizing the action of the Commissioner in the prosecution of these cases, and thus protect the interest of the wage-earner who is too poor to engage the services of a lawyer, and for this reason often cheated out of money that he has honestly earned.

There is a wise provision of the law that gives the right to a poor person to sue without cost. Mills' Annotated Statutes, No. 676, say: "If any court shall, before or after the commencement of any suit, be satisfied that the plaintiff is a poor person, and unable to prosecute his or her suit and pay the costs and expenses thereof, they may, in their discretion, permit him to commence and prosecute his action as a poor person; and thereupon such person shall have the necessary writs, processes and proceedings, as in other cases, without charge; and if the plaintiff recover judgment there shall be a judgment for his costs."

If the various justices of the peace would carry out the intent of this statute, the wage-beating phase of the industrial problem would be practically solved; but we find that the average justice has in the past been more solicitous in getting his fees for work performed than in doing justice to poor people, who should be his first care. With the abolishment of the fee system, and the putting of our justices of the peace on a salary basis, I believe that a better condition would ensue.

The following table will give an insight into the business of wage-collecting done by the bureau in this respect alone, which is governed only by the law of humanity, and not by any statute enacted or in the law creating the Bureau of Labor Statistics:

## AGGREGATE AMOUNT OF CLAIMS FILED AND COLLECTED

Month	No. Claims	Amount	Amount
1911	Filed	Filed	Collected
January .....	86	\$ 2,590.92	\$ 1,202.27
February .....	76	2,094.45	1,627.94
March .....	84	2,138.16	1,624.39
April .....	42	486.13	239.67
May .....	70	697.68	484.13
June .....	106	2,519.27	1,791.15
July .....	29	520.95	485.80
August .....	42	1,418.59	1,284.53
September .....	63	1,506.97	1,219.57
October .....	55	1,108.42	940.52
November .....	65	1,539.45	1,139.55
December .....	68	1,810.45	1,526.35
Total .....	786	\$18,431.44	\$13,565.87

Month	No. Claims	Amount	Amount
1912	Filed	Filed	Collected
January .....	87	\$ 1,665.30	\$ 1,315.72
February .....	51	2,738.05	2,535.66
March .....	63	1,188.21	1,024.20
April .....	72	1,612.99	1,308.89
May .....	52	809.05	683.34
June .....	37	623.44	491.90
July .....	63	1,540.91	1,398.01
August .....	62	1,485.55	1,375.30
September .....	63	9,886.58	9,749.97
October .....	68	1,931.10	1,619.89
November .....	72	1,965.69	1,659.78
December .....	70	1,742.52	1,232.52
Total .....	760	\$27,189.39	\$24,395.18



## REPORT ON STATE FREE EMPLOYMENT OFFICES

## DENVER FREE EMPLOYMENT OFFICE

Denver, Colo., December 20, 1912.

Hon. Edwin V. Brake,  
Denver, Colo.

Dear Sir: Attached find statistical report of the Denver branch of the Colorado Free Employment Bureau for the term just closed. In addition, I desire to add a few words of comment upon, and recommendation for, the improvement of the service.

I have endeavored to the best of my ability to so conduct the office that it might best perform its mission of bringing the manless job and jobless man in touch.

I find that the office does not get enough publicity. We should have a fund for advertising purposes, so as to present the services of the bureau to the large number of employers who do not now use it. The \$2,000 annual appropriation will only cover the expense of the three offices as now conducted in the strictest economy, and allows nothing to be spent in advertising.

I think that the efficiency of the bureau might be increased 50 per cent if a reasonable appropriation were made for advertising purposes.

As to the general workings of the office, I find that this subject has been so fully covered by my predecessor as to need no further attention at my hands.

I desire to pay a just tribute to the conscientious service performed by my assistant, Mrs. Imogene G. Clarke. A better selection for this bureau than Mrs. Clarke could not be made. The handling of female employment requires a world of tact and patience, if it is to be handled with any degree of satisfaction to the employer and employe. These traits Mrs. Clarke has shown in a remarkable degree. Besides a natural intelligence, she brings several years' training to bear on the work.

Respectfully submitted,

(Signed) ELI M. GROSS,  
Superintendent.

## DENVER—MALE

Character of Employment	Applications for Employment			Applications for Help	
	No. Filed	No. Positions Secured	No. Un- filled	No. Filed	No. Unfilled
Beet fields.....	42	42	....	70	28
Bakers .....	20	6	14	6	....
Bell boys .....	64	16	48	16	....
Bus boys .....	94	28	66	28	....
Clerks .....	32	10	22	10	....
Coal-shovelers .....	98	52	46	52	....
Cooks .....	592	258	334	276	18
Celery work .....	60	60	....	90	30
Carpenters .....	342	38	304	38	....
Cement workers.....	174	32	142	32	....
Dairy hands .....	590	190	310	214	28
Dishwashers .....	710	320	390	348	28
Engineers .....	172	....	172	....	....
Electricians .....	70	....	70	....	....
Elevator pilots .....	14	4	10	4	....
Firemen .....	52	4	48	4	....
Fruit-pickers .....	700	370	330	370	....
Farm hands .....	2,374	758	1,616	826	68
Gardeners .....	86	16	70	16	....
Hay hands .....	76	66	10	90	24
Hotel work .....	2	2	....	2	....
Housemen .....	382	146	236	136	10
Janitors .....	278	26	252	26	....
Kitchen men .....	634	252	382	274	18
Lumber men .....	64	4	60	4	....
Lawn men .....	70	14	56	14	....
Laborers .....	9,660	1,930	7,730	1,930	....
Machinists .....	34	4	30	4	....
Nurses .....	20	....	20	....	....
Pantry men .....	86	22	64	22	....
Porters .....	226	44	182	44	....
Rock men .....	80	26	54	26	....
Stable men .....	34	14	20	10	4
Section men .....	140	140	....	168	28
Solicitors .....	36	20	16	36	16

## BIENNIAL REPORT

## DENVER—MALE

Character of Employment	Applications for Employment			Applications for Help	
	No. Filed	No. Positions Secured	No. Un- filled	No. Filed	No. Unfilled
Teamsters .....	62	22	40	22	....
Waiters .....	452	186	266	186	....
Yard men .....	308	158	150	174	16
Totals .....	18,840	5,280	13,560	5,568	316

## DENVER—FEMALE

Character of Employment	Applications for Employment			Applications for Help	
	No. Filed	No. Positions Secured	No. Un- filled	No. Filed	No. Unfilled
Beet fields .....	10	10	....	24	14
Cooks .....	380	328	52	334	6
Celery work .....	36	36	....	50	14
Chambermaids .....	276	232	44	246	14
Day work .....	216	186	30	192	6
Domestics .....	144	120	24	130	10
Dishwashers .....	238	228	10	262	34
Fruit-pickers .....	58	58	....	100	42
Housework .....	1,086	1,052	34	1,098	46
Hotel work .....	186	142	44	144	2
Housekeepers .....	192	130	62	130	....
Hospital work .....	370	306	64	306	....
Janitors .....	20	4	16	4	....
Kitchen work .....	20	10	10	10	....
Laundresses .....	152	130	22	134	4
Miscellaneous .....	378	378	....	398	20
Maids .....	58	48	10	52	4
Nurses .....	86	48	38	50	2
Pantry girls .....	34	24	10	26	2
Ranch women .....	204	170	34	186	16
Restaurants .....	238	188	50	196	8
Sewing girls .....	2	2	....	2	....
Waitresses .....	314	240	74	278	38
Totals .....	4,698	3,070	1,628	4,352	282

## DENVER

	Applications for Employment			Applications for Help	
	No. Filed	No. Positions Secured	No. Un- filled	No. Filed	No. Unfilled
1911					
January—					
Male .....	420	310	110	342	32
Female .....	244	234	10	254	20
February—					
Male .....	1,505	139	1,366	139	....
Female .....	173	137	36	137	....
March—					
Male .....	1,089	258	833	258	....
Female .....	182	130	52	130	....
April—					
Male .....	342	273	68	316	43
Female .....	231	211	20	234	23
May—					
Male .....	1,552	203	1,349	203	....
Female .....	195	139	56	157	18
June—					
Male .....	930	185	745	185	....
Female .....	196	168	28	178	10
July—					
Male .....	1,284	292	992	292	....
Female .....	146	139	7	154	15
August—					
Male .....	1,089	258	833	258	....
Female .....	182	130	52	130	....
September—					
Male .....	554	148	406	156	8
Female .....	158	132	26	132	....
October—					
Male .....	661	181	480	181	....
Female .....	181	145	36	145	....
November—					
Male .....	930	185	745	185	....
Female .....	196	168	28	178	10
December—					
Male .....	1,505	139	1,366	139	....
Female .....	173	137	36	137	....



DENVER					
1912	Applications for Employment			Applications for Help	
	No. Filed	No. Positions Secured	No. Un- filled	No. Filed	No. Unfilled
January—					
Male .....	661	181	480	181	....
Female .....	181	145	36	145	....
February—					
Male .....	509	341	169	369	28
Female .....	247	232	15	242	10
March—					
Male .....	217	207	10	246	39
Female .....	200	100	100	100	....
April—					
Male .....	351	123	227	123	....
Female .....	196	178	18	184	6
May—					
Male .....	1,505	139	1,366	139	....
Female .....	175	137	36	137	....
June—					
Male .....	342	273	68	316	43
Female .....	231	211	20	234	23
July—					
Male .....	421	310	111	342	32
Female .....	244	234	10	254	20
August—					
Male .....	342	273	68	316	43
Female .....	231	211	20	234	23
September—					
Male .....	509	341	169	369	28
Female .....	247	232	15	242	10
October—					
Male .....	331	261	68	294	44
Female .....	217	207	10	246	39
November—					
Male .....	351	123	227	123	....
Female .....	196	178	18	184	6

## COLORADO SPRINGS FREE EMPLOYMENT OFFICE

Colorado Springs, Colo., November 30, 1912.

Hon. Edwin V. Brake,  
State Labor Commissioner,  
Denver, Colo.

Dear Sir: I beg leave to submit the following report of the business transacted by this office, and on labor conditions in this district, during my incumbency, since September 15, 1911.

The supply of labor has been sufficient to meet all demands, except during the summer months of this year, when we were short of competent men and were unable to find them anywhere in the West. The calls for men were particularly urgent from the various railroads, whose low wage scale offers small inducements when other work is available.

The winter months of 1911-1912 were very quiet in this district, many men being unable to find employment sufficient to provide the necessities of life.

During this period we were greatly assisted by the Associated Charities and the police department, which provided meals, lodging, and other greatly appreciated help.

During the year this office has been called on by many people who had difficulty in securing satisfactory settlement for work done, and we are pleased to say that in every case settlement was made without resort to the courts. We believe this feature is one of the best in connection with this department, as these workers are nearly always without means to force a settlement with their employers.

I wish here to call your attention to the great need of a law in this state compelling employers to pay their help when discharged, either in cash or negotiable paper. The present system is that of time or pay checks which can be cashed only at usually distant points and at some future date, working great hardship, and loss of time as well.

There have been but few violations of the eight-hour law on public work in this district during the past year, and in all cases immediate observance of the law was secured as soon as parties were notified.

While the urgent need of larger appropriations for the free employment offices has been placed before our legislatures for several sessions, we feel the necessity of again calling their attention to our most noticeable needs, viz.: funds for advertising, to keep the wants and business of these offices before the public at all times, and for long-distance telephone service. We also should have a small allowance for messenger service.

The extensive use of telephones in the rural districts makes it very convenient for the farmers to call this office for any help needed, and our report will show a large number of workers being

sent out on this class of work. We are greatly inconvenienced in not having sufficient funds to make full use of long-distance telephones to keep in touch with this class of work.

Many inquiries come to this office from all sections of the country regarding labor conditions, to all of which we reply at length. We also have many inquiries as to the working out of our labor laws; these latter usually from educational institutions and labor organizations, proving that our Colorado laws are attracting attention.

The fact that all crafts of mechanics in this district are thoroughly organized, and prepared to take care of their membership, relieves this office of many of that class of workers, and we are under many obligations to these organizations for assistance tendered in placing their members.

We also wish to thank the local officials of the Denver & Rio Grande and Midland Railroads for many courtesies extended to our office, in assisting the needy unemployed to reach localities where work could be secured.

Respectfully submitted,

(Signed) W. C. DAILY,  
Superintendent.

#### COLORADO SPRINGS—MALE

Character of Employment	Applications for Employment			Applications for Help	
	No. Filed	No. Positions Secured	No. Un- filled	No. Filed	No. Unfilled
Agents .....	2	2	....	2	....
Butlers .....	2	2	....	2	....
Bell boys .....	18	18	....	24	6
Baker helper .....	1	1	....	1	....
Bakers .....	46	35	11	35	....
Buss boys .....	64	64	....	77	13
Blacksmiths .....	2	2	....	2	....
Bill distributors .....	35	35	....	35	....
Bricklayers .....	3	3	....	3	....
Box-makers .....	5	5	....	5	....
Charcoal-burners .....	2	2	....	2	....
Concrete men .....	141	141	....	166	25
Corn-cutters .....	19	19	....	26	7
Cement workers .....	3	3	....	3	....
Chefs .....	12	12	....	12	....
Coachman .....	1	1	....	1	....
Cooks .....	176	153	23	162	9
Collector .....	1	1	....	1	....

## COLORADO SPRINGS—MALE

Character of Employment	Applications for Employment			Applications for Help	
	No. Filed	No. Positions Secured	No. Un- filled	No. Filed	No. Unfilled
Carpenters .....	93	81	12	81	....
Delivery men .....	12	2	10	2	....
Dishwashers .....	283	245	38	245	....
Dairymen .....	10	9	1	9	....
Elevator boys .....	4	4	....	4	....
Engineers .....	15	14	1	14	....
Electricians .....	1	1	....	1	....
Firemen .....	51	38	13	34	7
Foresters .....	148	148	....	148	....
Fruit-pickers .....	16	16	....	40	24
Florists .....	7	7	....	7	....
Garage helpers .....	5	5	....	5	....
Gardeners .....	119	119	....	119	....
Housemen .....	405	398	7	398	....
Herders .....	10	10	....	10	....
Horseshoers .....	5	5	....	5	....
Hotel clerks .....	4	4	....	4	....
Hod-carriers .....	6	6	....	6	....
Janitors .....	63	53	10	53	....
Kitchen help .....	82	72	10	72	....
Kennel men .....	6	6	....	6	....
Lawn men .....	131	131	....	131	....
Laundry men .....	4	4	....	4	....
Laborers .....	3,796	3,185	611	3,469	399
Messengers .....	8	8	....	8	....
Miners .....	16	16	....	16	....
Milkers .....	144	135	9	136	1
Nurse .....	1	1	....	1	....
Porters .....	88	84	4	84	....
Painters .....	8	2	6	2	....
Pantry men .....	61	59	2	59	....
Plumbers' helpers .....	3	3	....	3	....
Pin boys .....	16	16	....	16	....
Ranch help .....	742	689	44	785	87
Roofers .....	24	24	....	24	....
Rockmen .....	49	49	....	55	6



## COLORADO SPRINGS—MALE

Character of Employment	Applications for Employment			Applications for Help	
	No. Filed	No. Positions Secured	No. Un- filled	No. Filed	No. Unfilled
Stone masons .....	6	6	....	11	5
Salesmen .....	2	2	....	2	....
Steamfitter .....	1	1	....	1	....
Store clerks .....	45	18	27	18	....
Section men .....	219	219	....	358	139
Section foremen .....	4	4	....	4	....
Sheep-herders .....	13	13	....	13	....
Solicitors .....	69	55	14	55	....
Stable men .....	27	27	....	30	3
Teamsters .....	314	279	35	329	50
Team and drivers.....	117	105	12	114	19
Timber men .....	17	17	....	22	5
Tie-cutters .....	5	5	....	5	....
Valets .....	2	2	....	2	....
Watchman .....	1	1	....	1	....
Waiters .....	136	126	10	126	....
Yardmen .....	83	83	....	83	....
Totals .....	8,030	7,120	910	7,789	805

## COLORADO SPRINGS—FEMALE

Character of Employment	Applications for Employment			Applications for Help	
	No. Filed	No. Positions Secured	No. Un- filled	No. Filed	No. Unfilled
Agents .....	3	3	....	3	....
Cashiers .....	6	6	....	6	....
Clerks .....	2	2	....	2	....
Chambermaids .....	379	315	33	332	....
Cooks .....	484	489	....	510	3
Dishwashers .....	113	111	2	111	....
Day work .....	829	764	113	728	....
Emergency .....	3	3	....	3	....
Fruit-packers .....	8	8	....	8	....
Floor girls .....	24	24	....	28	4

## COLORADO SPRINGS—FEMALE

Character of Employment	Applications for Employment			Applications for Help	
	No. Filed	No. Positions Secured	No. Un- filled	No. Filed	No. Unfilled
General housework .....	1,133	1,152	17	1,156	74
Housekeepers .....	43	38	8	35	....
Housemaids .....	8	8	....	8	....
Kitchen help .....	104	98	26	88	4
Linen room .....	4	4	....	4	....
Laundry .....	294	271	20	271	....
Nurses .....	99	101	2	102	1
Pastry cooks .....	5	5	....	5	....
Pantry girls .....	87	87	....	87	....
Pressing and cleaning..	2	2	....	2	....
Scrub women .....	9	9	....	9	....
Second girls .....	194	171	18	169	3
Seamstresses .....	21	12	9	12	....
Solicitors .....	1	4	....	4	....
Waitresses .....	466	434	32	449	18
Totals .....	4,324	4,121	280	4,132	107

## COLORADO SPRINGS

	Applications for Employment			Applications for Help	
	No. Filed	No. Positions Secured	No. Un- filled	No. Filed	No. Unfilled
1911					
January—					
Male .....	270	193	77	193	....
Female .....	207	185	22	192	7
February—					
Male .....	203	181	22	181	....
Female .....	146	134	12	134	....
March—					
Male .....	226	198	28	198	....
Female .....	186	186	....	186	....
April—					
Male .....	266	194	72	195	1
Female .....	220	210	10	220	10

## COLORADO SPRINGS

	Applications for Employment			Applications for Help	
	No. Filed	No. Positions Secured	No. Un- filled	No. Filed	No. Unfilled
1911					
May—					
Male .....	385	333	52	333	....
Female .....	275	275	....	285	10
June—					
Male .....	329	297	32	297	....
Female .....	305	305	....	305	....
July—					
Male .....	297	297	....	297	....
Female .....	395	344	51	359	15
August—					
Male .....	266	266	....	266	....
Female .....	346	346	....	346	....
September—					
Male .....	401	367	34	369	2
Female .....	200	195	5	195	....
October—					
Male .....	313	288	25	288	....
Female .....	89	87	2	87	....
November—					
Male .....	278	197	81	197	....
Female .....	90	90	3	90	....
December—					
Male .....	251	173	78	173	....
Female .....	77	77	....	79	2
1912					
January—					
Male .....	335	295	40	295	....
Female .....	126	122	4	122	....
February—					
Male .....	214	195	126	195	....
Female .....	103	103	....	103	....
March—					
Male .....	304	236	68	236	....
Female .....	95	90	5	90	....

## COLORADO SPRINGS

1912	Applications for Employment			Applications for Help	
	No.	No. Positions	No. Un-	No.	No.
	Filed	Secured	filled	Filed	Unfiled
April—					
Male .....	547	424	123	434	10
Female .....	112	101	11	101	....
May—					
Male .....	696	622	74	622	....
Female .....	235	224	11	230	6
June—					
Male .....	553	463	90	463	....
Female .....	232	195	37	198	3
July—					
Male .....	560	558	2	741	183
Female .....	190	190	....	195	5
August—					
Male .....	543	538	5	763	225
Female .....	262	262	....	288	26
September—					
Male .....	495	482	13	705	223
Female .....	223	223	....	223	....
October—					
Male .....	513	487	26	638	154
Female .....	134	115	19	115	....
November—					
Male .....	251	210	71	210	....
Female .....	95	64	31	61	....

## PUEBLO FREE EMPLOYMENT OFFICE

Pueblo, Colo., December 1, 1912.

Hon. Edwin V. Brake,  
Deputy Labor Commissioner,  
Denver, Colo.

Dear Sir: I am herewith enclosing my report of the business transacted in this office during the past biennial term—the number of applications for employment, the number of situations secured, the number of applications for help received, and the number persons secured for employers during that period.



As you will notice by this report, the amount of business done in this office during the past two years greatly exceeds that done during the previous two years. While the industrial situation for the past two years has been very good, it is not that alone that is the cause of the increase of business of this office. The employers of labor are gradually becoming aware of the fact that they can obtain help absolutely free of charge to both the employer and employe, and are availing themselves of our service, with the result that there has been a very large amount of business done in this office during the past summer and fall months.

During the months of June, July, August, September, and October of this year we have had calls for all the help, in the line of ranch, construction, and railroad work, that we could possibly furnish.

One evil with which we have been afflicted, that has been a detriment to the benefits which the employers would have secured from this office, is the failure of persons who have applied to this office for employment, and secured it, to report to the employer and to notify this office that they had not taken the positions secured here. This is an evil for which there seems to be no remedy, and I have at this time no recommendation to make that would remedy it. There is also another evil which might be corrected by an amendment to the law creating these offices. This is the failure of persons who have secured employment at this office in positions out of the city, and where transportation has been furnished by the employer, to report to the employer who furnished the transportation, and who have thus defrauded the employer out of the transportation, besides disappointing him, and bringing discredit on the office through which they secured the employment.

I believe a law should be passed making it a misdemeanor for a person to accept transportation to his place of employment, and then fail or refuse to go to work. But there should, of course, be a written agreement as to the wages and conditions of such employment.

This would act as a check on those persons who, in order to enable themselves to travel over the country, would defraud employers furnishing them with employment, and transportation to same, and thus bring discredit on the office through which they were furnished the position free of charge.

This office has been hampered in its work during the past term by the lack of sufficient appropriation by the legislature to properly maintain it. It is absolutely necessary that a suitable office be maintained in the business part of the city, with suitable facilities to properly handle the rapidly increasing business of the office.

Respectfully submitted,

(Signed) L. A. TANQUARY,  
Superintendent.

## PUEBLO—MALE

Character of Employment	Applications for Employment			Applications for Help	
	No. Filed	No. Positions Secured	No. Un- filled	No. Filed	No. Unfilled
Bakers .....	4	4	....	4	....
Barbers .....	325	285	40	310	25
Bell boys .....	34	19	15	19	....
Beet-thinners .....	64	64	....	110	46
Boilermakers .....	6	2	4	2	....
Buss boys .....	106	64	42	64	....
Blacksmiths .....	32	22	10	25	3
Blacksmith helpers .....	23	13	10	13	....
Butchers .....	6	2	4	2	....
Cowboy .....	1	1	....	1	....
Clerks .....	80	40	40	40	....
Celery work .....	37	37	....	37	....
Canvassers .....	72	59	13	107	48
Carpenters .....	167	130	37	157	27
Cement men .....	105	95	10	91	6
Cleaning .....	91	33	58	43	10
Coal-miners .....	78	68	10	68	....
Concrete men .....	46	22	24	22	....
Cooks .....	349	257	92	249	4
Dishwashers .....	592	347	245	347	....
Dairymen .....	207	180	27	194	14
Decorators .....	2	2	....	2	....
Distributors .....	10	4	6	4	....
Elevator pilots .....	20	12	8	12	....
Engineers .....	2	2	....	2	....
Foundry help .....	18	16	2	16	....
Firemen .....	12	6	6	6	....
Factory help .....	10	3	7	3	....
Grocery clerk .....	1	1	....	1	....
Gardeners .....	13	11	2	11	....
Hall men .....	10	4	6	4	....
Housemen .....	28	17	11	17	....
Hay hands .....	357	327	30	336	19
Irrigators .....	80	62	18	66	4
Janitors .....	49	20	29	20	....
Kitchen men .....	35	19	16	19	....

## BIENNIAL REPORT

## PUEBLO—MALE

Character of Employment	Applications for Employment			Applications for Help	
	No. Filed	No. Positions Secured	No. Un- filled	No. Filed	No. Unfilled
Laborers .....	4,609	2,807	1,802	3,575	768
Lumber men .....	88	77	11	79	4
Laundry help .....	4	4	....	4	....
Machinists .....	10	1	9	1	....
Messengers .....	5	5	....	5	....
Office boys .....	14	5	9	5	....
Orderly .....	24	18	6	18	....
Plasterers .....	3	3	....	3	....
Painters .....	7	7	....	7	....
Porters .....	84	59	25	59	....
Quarry men .....	776	700	76	950	250
Ranch hands .....	1,408	1,047	461	1,031	66
Scrubs men .....	10	4	6	4	....
Salesmen .....	30	3	27	3	....
Section hands .....	1,420	1,273	147	2,708	1,437
Stable men .....	15	12	3	12	....
Sheep-herders .....	34	32	2	33	1
Sawmill men .....	91	83	8	86	3
Silver men .....	3	3	....	3	....
Solicitors .....	34	26	8	34	8
Steel-mill works .....	209	180	29	831	651
Tile-layer .....	1	1	....	1	....
Team and driver.....	1	1	....	1	....
Teamsters .....	590	501	89	894	393
Waiters .....	167	114	53	126	12
Wood-choppers .....	2	2	....	2	....
Yardmen .....	38	22	16	22	....
Totals .....	12,759	9,250	3,509	12,521	3,799

## PUEBLO—FEMALE

Character of Employment	Applications for Employment			Applications for Help	
	No. Filed	No. Positions Secured	No. Un- filled	No. Filed	No. Unfilled
Chambermaids .....	395	282	115	290	10
Cooks .....	321	296	25	344	48
Cashiers .....	18	4	14	4	....
Companions .....	6	2	4	2	....
Clerks .....	86	25	61	25	....
Canvassers .....	25	25	....	50	25
Dishwashers .....	83	72	11	68	6
Housework .....	613	608	5	688	107
House-cleaning .....	75	68	7	68	....
Housekeepers .....	20	5	15	5	....
Kitchen help .....	68	53	15	56	3
Laundry help .....	32	24	8	28	4
Nurses .....	41	31	10	31	....
Pantry girls .....	13	9	4	9	....
Seamstresses .....	31	20	11	20	....
Scrubbing .....	6	6	....	8	2
Stenographers .....	25	12	13	12	....
Silver girls .....	2	2	....	2	....
Waitresses .....	420	400	20	489	51
Totals .....	2,280	1,944	338	2,199	286

## PUEBLO

	Applications for Employment			Applications For Help	
	No. Filed	No. Positions Secured	No. Un- filled	No. Filed	No. Unfilled
1911					
January—					
Male .....	372	132	260	140	8
Female .....	92	88	4	128	40
February—					
Male .....	370	86	284	86	....
Female .....	112	108	4	120	12
March—					
Male .....	231	121	110	122	1
Female .....	112	103	9	115	12



PUEBLO					
	Applications for Employment			Applications for Help	
	No. Filed	No. Positions Secured	No. Un- filled	No. Filed	No. Unfilled
1911					
April—					
Male .....	292	150	142	150	....
Female .....	80	72	8	84	12
May—					
Male .....	308	228	80	232	4
Female .....	84	80	4	98	18
June—					
Male .....	436	226	210	226	....
Female .....	64	64	....	83	19
July—					
Male .....	478	155	323	155	....
Female .....	117	81	36	99	18
August—					
Male .....	242	99	143	99	....
Female .....	108	100	8	116	16
September—					
Male .....	497	189	308	189	....
Female .....	92	79	13	91	14
October—					
Male .....	457	259	192	259	....
Female .....	83	49	34	49	....
November—					
Male .....	216	140	76	142	2
Female .....	65	46	19	46	....
December—					
Male .....	348	153	195	153	....
Female .....	83	58	25	68	10
1912					
January—					
Male .....	272	133	139	133	....
Female .....	83	77	6	91	14
February—					
Male .....	342	142	200	142	....
Female .....	118	92	26	92	....

1912	PUEBLO Applications for Employment			Applications for Help	
	No. Filed	No. Positions Secured	No. Un- filled	No. Filed	No. Unfilled
March—					
Male .....	292	137	155	175	39
Female .....	72	62	10	70	8
April—					
Male .....	252	186	66	191	5
Female .....	90	79	11	101	22
May—					
Male .....	338	283	55	331	48
Female .....	117	105	12	117	12
June—					
Male .....	564	528	36	962	434
Female .....	82	67	15	87	20
July—					
Male .....	1,033	1,010	23	1,455	445
Female .....	111	90	21	103	13
August—					
Male .....	1,180	1,158	22	2,086	928
Female .....	127	105	22	115	10
September—					
Male .....	1,381	1,336	45	2,143	807
Female .....	108	95	13	98	3
October—					
Male .....	1,515	1,493	22	2,379	886
Female .....	162	153	9	162	9
November—					
Male .....	1,249	816	433	989	173
Female .....	150	117	33	124	7

RECAPITULATION

	Applications for Employment			Applications for Help	
	No. Filed	No. Positions Secured	No. Un- filled	No. Filed	No. Unfilled
Denver—					
Male .....	18,840	5,280	13,560	5,568	316
Female .....	4,698	3,070	628	4,352	282
Colorado Springs—					
Male .....	8,030	7,120	910	7,789	805
Female .....	4,324	4,121	280	4,132	107
Pueblo—					
Male .....	12,759	9,250	3,509	12,521	3,799
Female .....	2,280	1,944	338	2,199	286
Grand totals....	50,931	30,785	19,225	36,561	5,595

## CHAPTER III

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### LABOR ORGANIZATIONS OF COLORADO

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#### INTERNATIONAL UNION HEADQUARTERS

Western Federation of Miners—Charles H. Moyer, President; Ernest Mills, Secretary-Treasurer; offices, 605 Railroad Building, Denver.

#### STATE LABOR BODIES

(To Federate the Unions That They May Work as a Unit.)

Colorado State Federation of Labor—John McLennan, President; William T. Hickey, Secretary-Treasurer; offices, 411-412 Exchange Building, Denver.

United Mine Workers of America, District No. 15, comprising the States of Colorado, Utah, and New Mexico—Thomas Williams, President; Edward Doyle, Secretary-Treasurer; John Lawson, National Executive Board Member; offices, 514 Barclay Block, Denver.

Barbers' State Association—Elias Anderson, Secretary-Treasurer; office, Pueblo.

International Association of Machinists, District Lodge No. 20—Thomas F. Walsh, Secretary-Treasurer; office, 767 South Clarkson Street, Denver.

#### LOCAL CENTRAL LABOR BODIES

(Composed of Delegates from Local Unions.)

Alamosa, Trades Assembly—J. A. Harris, Secretary; Box 532.

Colorado Springs, Building Trades Council—James Hildrich, Secretary; 633 North Franklin Street.

Colorado Springs, Federated Trades Council—Charles Hastings, Secretary; 443 Cooper Avenue.

Cripple Creek District, Trades Assembly—John Turney, Secretary; Victor.

Denver, Allied Printing Trades Council—Thomas P. Rodgers, Secretary; Quincy Building; Box 1447.

Denver, Building Trades Council—Charles P. Austin, Secretary; 2541 Kensing Court.

Denver, Trades and Labor Assembly—J. F. Bedford, Secretary; Box 1372.

Denver, Union Label League—Ed. J. Hines, Secretary; Box 759.

Fort Collins, Labor Assembly—C. E. Moore, Secretary; Box 1017.

Grand Junction, Trades Assembly—E. R. Miller, Secretary; 124 West Fifth Street.



Montrose, Trades and Labor Assembly—George Harrison, Secretary; Montrose.  
Pueblo, Allied Printing Trades Council—H. E. Reynolds, Secretary; 1419 East  
Tenth Street.

Pueblo, Building Trades Council—W. W. Castles, Secretary; 114½ East Fourth  
Street.

Pueblo, Trades and Labor Assembly—Jesse E. Holt, Secretary; Box 462.

Pueblo, Union Label League—Ed. Anderson, Secretary; 179 North Union Avenue.

Silverton, Trades and Labor Assembly—Norman Cameron, Secretary; Box 168.

Trinidad, Trades Assembly—J. W. Wolff, Secretary; 801 Garfield Avenue.

## LOCAL UNIONS IN COLORADO

Name	Location	Membership	Secretary	Address
Bakers and Confectioners	Denver	160	Ray E. Lowderback	1625 E. 33rd Ave.
Bakers and Confectioners	Pueblo	50	A. J. Dissler	Box 162
	—	—		
		210		
Barbers (Journymen)	Canon City	15	M. C. Maxwell	619½ Main St.
Barbers (Journymen)	Colorado Springs	55	A. A. Pardon	23 E. Kiowa St.
Barbers (Journymen)	Cripple Creek	25	C. C. McKahan	117 E. Bennett Ave.
Barbers (Journymen)	Denver	300	John E. Connelly	503 Club Bldg.
Barbers (Journymen)	Durango	15	R. L. Hollenborn	449 4th Ave.
Barbers (Journymen)	Florence	10	O. L. Ryan	104 S. Pikes Peak Ave.
Barbers (Journymen)	Fort Collins	15	C. E. Morrison	112 Trimble Court
Barbers (Journymen)	Grand Junction	19	R. M. Woodworth	531 Main St.
Barbers (Journymen)	Leadville	20	M. L. Lineweaver	Box 607
Barbers (Journymen)	Pueblo	80	Ed. Anderson	219 N. Union Ave.
Barbers (Journymen)	Salida	15	F. F. Ferguson	108 E. 1st St.
Barbers (Journymen)	Trinidad	50	Karl Bower	208 N. Commercial
	—	—		
		619		
Bartenders	Alamosa	25	H. B. Wiley	Alamosa
Bartenders	Colorado City	25	John Greenwald	512 Colorado Ave.
Bartenders	Cripple Creek District	25	Roy Tiffery	227 Bennett Ave., Cripple Creek

## LOCAL UNIONS IN COLORADO—Continued

Name	Location	Membership	Secretary	Address
Bartenders	Denver	250	Fred Wessel	1031 17th St.
Bartenders	Leadville	40		
Bartenders	Pueblo	125	George Murphy	Box 626
Bartenders	Salida	25	R. R. Copeland	Box 483
Bartenders	Silverton	25	George L. McCoy	Box 203
		—		
		540		
Beer Bottlers and Drivers	Denver	90	Ernest Kemmler	938 9th St.
Beer Drivers, Stablemen	Denver	125	Ernest Kemmler	938 9th St.
Brewery Workers	Denver	90	Ernest Kemmler	938 9th St.
Brewery Workers	Leadville	10	Wallace McCarthy	311 Elm St.
Brewery Workers	Pueblo	80	Arthur Olson	920 Damson St.
		—		
		395		
Bindery Women	Denver	75	Miss Mattie Hoffman	254 S. Pearl St.
		—		
		75		
Blacksmiths	Alamosa	35	G. E. Mayfield	Box 321
Blacksmiths	Colorado City	50	Ben Norling	200 Haggerman St.
Blacksmiths and Helpers	Denver	170	John Mauro	3737 Osage St.

Blacksmiths and Helpers .....	50	Pueblo .....	H. Gerrish.....231 Oneida St.
Blacksmiths .....	50	Salida .....	C. C. Wager.....Salida
Blacksmiths .....	50	Trinidad .....	Charles C. Clelland.....316 Johnson Ave.
—	—	—	—
Boilermakers .....	20	Alamosa .....	Charles Darling.....Box 624
Boilermakers .....	35	Colorado City .....	Carl West.....16 Lincoln Ave.
Boilermakers .....	150	Denver .....	H. S. Shaffroth.....3742 Wyncoop St.
Boilermakers .....	30	Grand Junction .....	E. H. Friend.....Argyle Hotel
Boilermakers .....	40	Pueblo .....	George S. Warder.....408 E. Routt Ave.
Boilermakers .....	20	Salida .....	William Dargavel.....821 E. St.
Boilermakers .....	7	Trinidad .....	Thomas Love.....311 Godding Ave.
—	—	—	—
Bookbinders .....	18	Colorado Springs .....	E. E. Lesh.....528 N. Weber
Bookbinders .....	75	Denver .....	R. Y. Harrison.....1176 S. Logan St.
—	—	—	—
Bricklayers and Masons .....	16	Alamosa .....	Charles P. Switzer.....Box 171
Bricklayers .....	38	Colorado Springs .....	H. A. Dunbar.....Box 331
Bricklayers .....	275	Denver .....	H. A. McCord.....Box 176
Bricklayers .....	10	Durango .....	George Weaver.....1743 W. 2nd Ave.
Bricklayers and Masons .....	10	Fort Collins .....	A. D. Michaud.....500 Stover St.

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## LOCAL UNIONS IN COLORADO—Continued

Name	Location	Membership	Secretary	Address
Bricklayers	Florence	15	J. S. Westfall	534 Main St.
Bricklayers and Masons	Fort Morgan	11	H. N. Carmichael	423 Deuel St.
Bricklayers	Montrose	15	Harry Jones	Box 322
Bricklayers and Masons	Pueblo	50	Arthur Jones	Box 548
Bricklayers and Masons	Trinidad	30	F. L. Fox	212 Broom St.
		—		
		461		
Brick, Tile and Terra-Cotta Workers	Denver	175	W. W. Galehouse	2953 W. Denver Place
		—		
		175		
Bridge and Structural Iron Workers	Denver	60	R. T. McAdams	2334 Stout St.
Bridge and Structural Iron Workers	Pueblo	35	W. E. Palmer	Box 1086, Station A
		—		
		95		
Broom and Whisk Makers	Denver	55	W. J. Selzer, Jr.	3455 Lawrence St.
Broom and Whisk Makers	Pueblo	5	S. P. Myers	122 Block West
		—		
		60		
Building Laborers	Colorado Springs	15	George C. Richards	616 Sierra Madre
Building Laborers	Denver	340	Charles Triplett	2420 16th St.

Building Laborers (Int.) .....	75	James Yarger.....	Box, 73
Building Laborers .....	25	W. A. Shaff.....	812 3rd Ave.
Building Laborers .....	10	James Fallon.....	516 W. Magnolia Ave.
Building Laborers .....	50	W. W. Smith.....	1510 Jackson St.
<hr/>			
Carmen (Brotherhood of Railway) .....	35	Curtis Manley.....	Box 332
Carmen (Brotherhood of Railway) .....	24	T. T. Sanderson.....	Box 774
Carmen (Brotherhood of Railway) .....	75	J. S. De Haase.....	374 Marion St.
Carmen, Coach and Car Builders.....	75	E. C. Simmons.....	401 Club Bldg.
Carmen (Brotherhood of Railway) .....	60	C. B. Kennet.....	441 Rockway
Carmen (Brotherhood of Railway) .....	36	W. C. Vogel.....	Box 158
Carmen (Brotherhood of Railway) .....	210	D. L. York.....	315 E. Abriendo Ave.
Carmen (Brotherhood of Railway) .....	20	W. W. Parks.....	La Junta
Carmen (Brotherhood of Railway) .....	75	F. J. Sibley.....	549 E. 2nd St.
<hr/>			
Carpenters .....	35	M. P. Kneifel.....	Box 412
Carpenters .....	25	C. Michels.....	Boulder
Carpenters .....	15	C. R. Forsman.....	113 S. 8th St.
Carpenters .....	50	Ed. Martin.....	808 Jefferson Ave.
Carpenters .....	250	F. L. Frentz.....	324 N. Custer Ave.
Carpenters .....	35	Ed. Walz.....	Box 264

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## LOCAL UNIONS IN COLORADO—Continued

Name	Location	Membership	Secretary	Address
Carpenters, No. 55.....	Denver	850	William Stocker.....	1947 Stout St.
Carpenters, No. 1847.....	Denver	400	B. Dodds.....	38 W. Byers Place
Carpenters, No. 528.....	Denver	250	Robert Currie.....	1947 Stout St.
Carpenters .....	Fort Collins	30	W. M. Cooper.....	628 La Porte Ave.
Carpenters .....	Fort Morgan	25	J. S. Dean.....	Fort Morgan
Carpenters .....	Grand Junction	75	S. O. Busket.....	1328 Rood Ave.
Carpenters .....	Greeley	35	John B. McAllister.....	1717 7th Ave.
Carpenters .....	Golden	25	Michael Sweeney.....	Box 321
Carpenters .....	Las Animas	25	J. C. Dorsey.....	Box 666
Carpenters .....	La Junta	25	W. W. Vanderim.....	416 Emerson Ave.
Carpenters .....	Leadville	12	Alfred Pomeroy.....	217 W. 5th St.
Carpenters .....	Loveland	15	Charles Mather.....	West 10th St.
Carpenters .....	Monte Vista	26	C. W. Chaney.....	Box 296
Carpenters .....	Montrose	20	L. M. Preston.....	Box 692
Carpenters .....	Pueblo	202	Thomas A. Asher.....	1225 E. 10th St.
Carpenters .....	Rocky Ford	17	Charles S. Lane.....	806 S. 13th St.
Carpenters .....	Salida	25	A. Sever.....	439 W. 2nd St.
Carpenters .....	Silverton	10	F. J. Flynn.....	Box 434
Carpenters .....	Sterling	15	J. G. Schwalm.....	Sterling
Carpenters .....	Trinidad	80	H. R. Kendall.....	153 Tillotson St.
Carpenters .....	Walsenburg	18	Charles P. Hutchinson.....	Walsenburg

— 2,600

Carriage and Wagon Makers.....	Denver	35	R. Hagelin.....	1535 E. Alameda Ave.
—	—	—	—	—
Cement Workers .....	Colorado Springs	25	Fred Gardner.....	Box 542
Cement Workers .....	Denver	25	William Meisenbach.....	1251 Stout St.
Cement Workers .....	Grand Junction	15	J. V. Hoffman.....	General Delivery
Cement Workers .....	Montrose	10	H. C. Jolly.....	Box 592
Cement Workers .....	Pueblo	25	W. A. Taylor.....	107 Woodland Ave.
—	—	—	—	—
Cigarmakers .....	Colorado Springs	20	H. G. Sewell.....	1530 Manitou Ave.
Cigarmakers .....	Denver	400	J. W. Sanford.....	201 Railroad Bldg.
Cigarmakers .....	Fort Collins	25	S. H. Manning.....	140 N. College Ave.
Cigarmakers .....	Pueblo	38	John J. Listerman.....	628 E. 3rd St.
Cigarmakers .....	Trinidad	25	James Daly.....	Box 374
—	—	—	—	—
Clerks (Retail) .....	Alamosa	30	B. G. Stanwood.....	Box 122
Clerks (Retail) .....	Colorado Springs	25	J. W. Walker.....	Hub Clothing Co.
Clerks (Retail) .....	Denver	75	F. J. Weithoff.....	Dreyfus Clothing Co.
Clerks (Retail) .....	Fort Collins	15	J. H. Johnson.....	Golden Rule Co.
Clerks (Retail) .....	Pueblo	35	G. L. Beck.....	308 N. Main St.
—	—	—	—	—



## LOCAL UNIONS IN COLORADO—Continued

Name	Location	Membership	Secretary	Address
Cooks (Journymen)	.....Cripple Creek	10	Roy Tiffery.....	227 E. Bennett Ave.
Cooks (Journymen)	.....Denver	125	William Young.....	318 Club Bldg.
Cooks (Journymen)	.....Silverton	25	George L. McCoy.....	Box 203
		—		
		160		
Coopers	.....Denver	75	Amos J. Allie.....	1248 9th St.
		—		
		75		
Electrical Workers	.....Colorado Springs	30	F. C. Burford.....	Box 654
Electrical Workers	.....Denver	100	C. A. Bristow.....	Room 40, King Blk.
Electrical Workers	.....Denver	150	Al Roy.....	Gas and Electric Bldg.
Electrical Workers	.....Leadville	20	F. D. Winton.....	228 E. 4th St.
Electrical Workers	.....Pueblo	40	L. C. Klinger.....	Box 76
Electrical Workers	.....Trinidad	25	H. C. Shelby.....	218 W. 1st St.
		—		
		365		
Elevator Constructors	.....Denver	23	G. D. Rogers.....	314 Fox St.
		—		
		23		

(4)	Engineers (Stationary) .....	Colorado Springs	18	F. Clark.....	303 S. Prospect St.
	Engineers (Stationary) .....	Denver	135	H. S. Peregrine.....	Box 467
	Engineers (Hoisting) .....	Denver	40	James Dunhill.....	1038 Cherokee St.
	Engineers (Stationary) .....	Pueblo	40	C. H. Springer.....	Box 376
			—		
	Garment Workers .....	Denver	300	Fannie Gotchy.....	21 Quitman St.
			—		
	Glass Workers .....	Denver	25	C. V. Atkinson.....	4735 Clay St.
			—		
	Granite Cutters .....	Denver	60	F. B. Webster.....	638 Mariposa St.
	Granite Cutters .....	Salida	6	William R. Ellis.....	417 W. 1st St.
			—		
	Horseshoers .....	Colorado Springs	15	J. F. Welch.....	23 S. Cascade Ave.
	Horseshoers .....	Denver	20	James A. Kinsley.....	1022 20th St.
			—		
	Ladies' Tailors .....	Denver	50	J. Schneider.....	1595 Julian St.
			—		
			50		

## LOCAL UNIONS IN COLORADO—Continued

Name	Location	Membership	Secretary	Address
Lathers .....	Colorado Springs	20	W. S. Walton.....	Box 908
Lathers .....	Denver	50	J. H. Mitchell.....	Hotel Saxton
Lathers .....	Pueblo	30	T. A. Dunlap.....	1202 Brown Ave.
—	—	—	—	—
—	—	100	—	—
Laundry Workers .....	Denver	30	Ed. Peterson.....	1130 12th St.
Laundry Workers .....	Pueblo	35	Miss Huilen.....	417½ Santa Fe Ave.
—	—	—	—	—
—	—	65	—	—
Leather Workers, Travelers' Goods .....	Denver	25	W. T. Deweese.....	4985 Wyandot St.
Leather Workers, Harness Makers .....	Pueblo	10	John B. Seeley.....	Box 139
—	—	—	—	—
—	—	35	—	—
Lithographers .....	Denver	30	Al H. Zabel.....	2147 Tremont Place
—	—	—	—	—
—	—	30	—	—
Letter Carriers Association .....	Denver	150	F. W. Anderson.....	Post Office
Letter Carriers Association .....	Pueblo	25	B. C. Benning.....	Post Office
—	—	—	—	—
—	—	175	—	—

Machinists .....	Alamosa .....	75	J. S. Howells.....	Box 176
Machinists .....	Colorado City .....	35	C. K. Hannan.....	923 S. Conejos, Colorado Springs
Machinists .....	Denver .....	525	H. B. Pfeffer.....	503 Club Bldg.
Machinists .....	Grand Junction .....	40	W. H. Smith.....	231 White Ave.
Machinists .....	La Junta .....	50	E. Seffens.....	Box 615
Machinists .....	Pueblo .....	75	T. J. Lynch.....	Hotel McDonnell
Machinists .....	Salida .....	75	T. C. Irwin.....	Box 324
Machinists .....	Trinidad .....	35	F. W. Hughart.....	816 Chestnut St.
		—		
		910		
Mailers, Newspaper .....	Denver .....	30	Ed. J. Kurl.....	2349 Grove St.
		—		
		30		
Marble Workers .....	Denver .....	21	H. A. Rohe.....	628 S. Pearl St.
		—		
		21		
Miners, Coal (U. M. W. of A.).....	Brookside .....	400	Felix Pogliano.....	Brookside, Florence
Miners, Coal .....	Coal Creek .....	15	Tony Butch.....	Coal Creek
Miners, Coal .....	Curtis .....	25	William Ferguson.....	Curtis
Miners, Coal .....	Erie .....	67	David Edwards .....	Erie
Miners, Coal .....	Frederick .....	75	James Kingdon .....	Frederick
Miners, Coal .....	Gorham .....	75	A. G. Stewart.....	Gorham
Miners, Coal .....	La Veta .....	185		



## LOCAL UNIONS IN COLORADO—Continued

Name	Location	Membership	Secretary	Address
Miners, Coal	.....Lafayette	700	G. H. Wilson.....	.....Lafayette
Miners, Coal	.....Louisville	500	F. J. Potesio.....	.....Louisville
Miners, Coal	.....Palisade	20	John Satterstrum.....	.....Palisade
Miners, Coal	.....Superior	125	Angelo Dandrea .....	.....Superior
Miners, Coal	.....Trinidad	600	Mike Livoda .....	.....Box 116
	—	—		
		2,787		
Miners, Metal (W. F. of M.).....	Cripple Creek	125	John Turney .....	.....Victor
Miners, Metal, At Large.....	.....Denver	250	Tony Romeo .....	.....Box 933
Miners, Metal .....	.....Aspen	50	George Smith .....	.....Box 1046
Miners, Metal .....	.....Central City	50	John Gorman .....	.....Box 537
Miners, Metal .....	.....Leadville	250	Abe Waldron .....	.....Box 3
Miners, Metal .....	.....Ophir	30	James Spurrier .....	.....Ophir
Miners, Metal .....	.....Ouray	35	A. M. Pryor.....	.....Ouray
Miners (Smeltermen) .....	.....Pueblo	300	Charlie Pogorelio.....	.....Box 755
Miners, Metal .....	.....Rico	10	Harry E. Fry.....	.....Box 470
Miners, Metal .....	.....Salida	150	Frank H. Nigro.....	.....Box 527
Miners, Metal .....	.....Silverton	300	Roderick McKenzie .....	.....Box 168
Miners, Metal .....	.....Telluride	50	B. B. Shute.....	.....Box 278
Miners, Metal .....	.....Creede	50	George Fultz.....	.....Box 543
	—	—		
		1,650		

Molders, Iron, etc. ....	100	William A. Sullivan.....	875 Knox Court
Molders, Iron, etc. ....	75	William Stoker.....	1214 Brown Ave.
—	—		
	175		
Moving Picture Operators .....	40	E. A. Shields.....	1422 Curtis St. (T. M. A. Hall)
Moving Picture Operators .....	15	H. H. Curtis.....	Box 255
—	—		
	55		
Musicians .....	30	Ernest Hanson.....	513 State St.
Musicians .....	110	H. P. Robinson.....	First Nat. Bank
Musicians .....	50	Edd. McClintock.....	127 E. Bennett Ave.
Musicians .....	300	F. J. Leibold.....	1432 Arapahoe St.
Musicians .....	30	W. T. Otton.....	Durango
Musicians .....	30	D. J. VanBradt.....	Fort Morgan
Musicians .....	50	E. R. Miller.....	124 W. 5th St.
Musicians .....	35	George Ranson, Jr.....	Box 65
Musicians .....	35	A. P. Willy .....	Leadville
Musicians .....	90	J. W. Swearinger.....	Box 378
Musicians .....	35	J. W. Marifold.....	Salida
Musicians .....	18	Miss Lotta Black.....	Silverton, Box 508
Musicians .....	60	Frank Glatzel.....	Box 778
—	—		
	873		

## LOCAL UNIONS IN COLORADO—Continued

Name	Location	Membership	Secretary	Address
Painters and Paperhangers	Alamosa	15	C. A. Baker	Alamosa
Painters and Paperhangers	Colorado Springs	75	Joseph Hildrich	633 N. Franklin
Painters and Paperhangers	Denver	480	Dwight Smith	1655 S. Emerson St.
Painters, Sign	Denver	15	W. C. Rayer	415 Club Bldg.
Painters and Paperhangers	Durango	6	A. W. Leaming	Box 542
Painters and Paperhangers	Grand Junction	35	J. A. Quinn	301 Rood Ave.
Painters and Paperhangers	La Junta	25	H. S. Downey	318 Cimarron St.
Painters and Paperhangers	Leadville	10	Ed. C. Stewart	717 Harrison St.
Painters and Paperhangers	Montrose	25	H. L. Lewis	Box 386
Painters and Paperhangers	Pueblo	75	George Wheatland	Box 161
Painters and Paperhangers	Trinidad	30	E. Van Vleck	800 Arizona Ave.
		—		
		791		
Pattern Makers	Denver	25	J. W. Vardie	2918 Champa St.
		—		
		25		
Photo Engravers	Denver	45	Chester J. Boettner	1420 Lawrence St.
		—		
		45		
Plasterers	Denver	125	H. R. Jenkins	127 S. Tejon St.
Plasterers	Colorado Springs	25	J. J. McCallin	457 Clarkson St.

Plasterers .....	15	J. W. Billings.....	417 Lorand Ave.
Plasterers .....	10	H. E. Wise.....	Box 252
—	—		
	175		
Plumbers and Steamfitters.....	15	Frank Basham.....	Alamosa
Plumbers and Steamfitters .....	50	W. H. Shideler.....	901 S. Nevada Ave.
Plumbers and Gasfitters .....	68	Frank Bryan.....	Box 896
Plumbers, Apprentices .....	35	Cyrus Lindwall.....	1618 Gilpin St.
Steamfitters and Helpers.....	30	Jake Jager.....	4812 Bryant St.
Plumbers and Steamfitters .....	19	R. E. Breed.....	748 Teller Ave.
Plumbers and Steamfitters .....	35	Frank M. Hermond.....	Box 602
Plumbers and Steamfitters .....	10	Charles Thompson.....	Box 530
—	—		
	262		
Pressmen and Assistants .....	25	Karl Graissle.....	418 E. Kiowa
Pressmen, Job .....	50	E. A. Braithwaite.....	Care Williamson & Haffner
Pressmen No. 40 .....	50	E. J. Gardner.....	1535 Colorado Blvd.
Pressmen, Web .....	50	George Pepo.....	4401 Alcott St.
Press Assistants .....	90	Thomas P. Rodgers.....	4421 Stuart St.
Pressmen and Assistants .....	25	W. H. Young.....	408 Summit St.
—	—		
	290		





Switchmen .....	35	George Ritchey.....	826 E. Cucharas St.
Switchmen .....	35	J. J. Riordan.....	3963 Larimer St.
Switchmen .....	50	W. R. Wilson.....	1329 Orman Ave.
—	—		
	120		
Tailors (Journeyman) .....	25	C. Kyar.....	1022 N. Arcadia
Tailors (Journeyman) .....	7	C. E. Flint.....	Box 644
Tailors (Journeyman) .....	60	M. Jarinkes.....	Care Van De Marks
Tailors (Journeyman) .....	17	A. L. Turano.....	Box 362
Tailors (Journeyman) .....	12	J. Reinold.....	Box 524
—	—		
	121		
Teamsters .....	25	Joe Murry.....	Box 293
Teamsters .....	20	Bud Peters.....	1123 W. 14th St.
Team Owners .....	150	H. Z. Land.....	3036 W. 22nd Ave.
Teamsters .....	18	Jacob W. Wurtz.....	445 W. Grand Ave.
Teamsters .....	60	Jesse W. Faker.....	Silverton
—	—		
	273		
Tent and Awning Makers.....	15	Clara E. Hartsough.....	2243 California St.
—	—		
	15		

LOCAL UNIONS IN COLORADO—Concluded

Name	Location	Membership	Secretary	Address
Theatrical Stage Employees	Colorado Springs	10	George F. Hendricks.	Box 522
Theatrical Stage Employees	Cripple Creek	11	Ed. Harrington.	Box 522
Theatrical Stage Employees	Denver	75	A. W. Hamilton.	Box 103
Theatrical Stage Employees	Pueblo	40	Sol Jacobs	Box 15
		—		
		136		
Tile Layers	Denver	25	Guy Hallack.	1200 S. Washington St.
Tile Layers' Helpers	Denver	25	Frank Novotny.	520 22nd St.
		—		
		50		
Tinners (Sheet Metal Workers)	Colorado Springs	12	J. H. Finnup.	Box 326
Tinners (Sheet Metal Workers)	Denver	75	Elmer O. Anderson.	2549 Humboldt St.
Tinners (Sheet Metal Workers)	Grand Junction	10	B. C. Christian.	122 N. 5th St.
Tinners (Sheet Metal Workers)	Pueblo	30	F. Wood.	705½ Main St.
		—		
		127		
Tobacco Strippers	Denver	50	Fanny Brandon.	3321 W. 38th Ave.
		—		
		50		
Typographical, No. 708.	Boulder	15	I. D. Billings.	2024 14th St.
Typographical	Canon City	9	H. W. Carothers.	Box 425

Typographical .....	Colorado Springs	85	J. H. Ingledue.....	Box 813
Typographical .....	Cripple Creek	14	E. F. Ballard.....	111 North A St.
Typographical .....	Denver	525	F. C. Birdsall.....	Box 681
Typographical .....	Durango	7	W. A. Navinger.....	Box 333
Typographical .....	Fort Collins	20	G. L. Stiffler.....	Box 651
Typographical .....	Grand Junction	15	C. W. Culhane.....	812 Colorado Ave.
Typographical .....	Greeley	15	Charles L. Kellow.....	921 13th Ave.
Typographical .....	Leadville	10	M. V. Devor.....	Box 262
Typographical .....	Pueblo	55	Frank Tullis.....	817 E. 5th St.
Typographical .....	Trinidad	25	Ernest M. Stone.....	Care Advertiser
Upholsterers .....	Denver	15	William Eggs.....	329 E. 7th Ave.
Waiters and Waitresses .....	Denver	250	J. M. Osborn.....	Box 781
Waiters .....	Cripple Creek	15	Roy Tiffery.....	227 Bennett Ave.
Waiters and Waitresses .....	Silverton	25	George L. McCoy.....	Box 302
Woman's Auxiliaries to Trade Unions.....		3,500		
		3,500		



## RAILROAD ORGANIZATIONS

## BROTHERHOOD OF LOCOMOTIVE ENGINEERS

Location	Membership	Secretary	Address
Basalt .....	...	A. M. Danielson.....	Box 16
Canon City.....	...	Fred F. Kearns.....	Box 198 B
Colorado City.....	66	F. J. Callahan.....	210 S. 18th St.
Denver .....	315	P. J. McGill.....	1470 Fillmore St.
Denver .....	75	F. Henchcliff.....	2247 W. 34th Av.
Denver .....	...	William Jenness.....	1057 Kalamath St.
Grand Junction.....	...	E. B. Rogers.....	358 Ouray Av.
La Junta.....	80	C. D. Everhart.....	402 Cimarron Av.
Pueblo .....	...	E. J. Reilly.....	617 E. Evans Av.
Salida .....	...	George E. Baldwin.....	Salida
Sterling .....	...	E. E. Patton.....	421 Pine St.
Trinidad .....	75	E. W. Cottrell.....	352 W. Kansas Av.
Total membership in the state.....			920
Ladies' auxiliaries .....			800
			<hr/> 1,720

## BROTHERHOOD OF RAILROAD FIREMEN AND ENGINEMEN

Location	Membership	Secretary	Address
Basalt .....	...	S. H. Miller.....	Box 63
Canon City.....	...	G. E. Dickinson.....	Box 275
Cardiff .....	...	Leo Heller .....	Cardiff
Colorado City.....	75	L. L. Crawford..	9 S. 16th St., Colorado Spgs.
Denver, No. 273.....	...	John Toole.....	1331 W. 13th Av.
Denver, No. 540.....	...	C. B. Bartholomew.....	208 Colorado Bldg.
Denver, No. 77.....	...	J. A. Rymer.....	1715 E. 35th Av.
Grand Junction, No. 475.	...	A. L. Halligan.....	310 Belford Av.
Grand Junction, No. 594.	...	William A. Coughlin.....	200 Rood Av.
La Junta.....	81	A. M. Erickson.....	Box 1035
Leadville .....	...	W. V. Murdock.....	520 E. 9th St.
Minturn .....	...	J. N. Wilson.....	Box 30
Pueblo .....	121	William R. Carr.....	Box 335
Pueblo .....	...	J. T. DeJersey.....	Box 40
Rico .....	...	W. G. Laube.....	Box 442
Salida .....	160	W. H. Allen.....	135 Park Av.
Sterling .....	...	J. S. Kennedy.....	426 Walnut
Trinidad .....	...	E. C. Jones.....	824 Tillotson St.
Total membership .....			1,640
Ladies' auxiliaries .....			915
			<hr/> 2,555

## BROTHERHOOD OF RAILROAD TRAINMEN

Location	Membership	Secretary	Address
Alamosa .....	127	W. F. Connelly.....	Box 444
Colorado City.....	110	F. E. Bartley....	22 N. Corona, Colorado Spgs.
Denver, No. 30.....	287	W. L. Morrissey.....	330 E. 19th Av.
Denver, No. 446.....	175	C. S. McElharron.....	2412 Lowell Blvd.
Denver, No. 680 (Switchmen) .....	310	J. C. Gstettenbaur.....	2129 W. 41st St.
Durango .....	125	C. E. Grenshaw.....	837 3rd Av.
Grand Junction.....	190	J. L. Montague.....	Box 435
La Junta.....	140	H. C. Trent.....	Box 1035
Leadville (Switchmen)...	40	W. E. Laughlin.....	Box 492
Pueblo, No. 32 (Switchmen) .....	296	R. P. Courts.....	129 Van Buren
Pueblo, No. 646.....	140	L. E. Timbers.....	819 W. 11th St.
Salida .....	277	T. T. Morris.....	330 E. 5th St.
Sterling .....	106	C. W. Keating.....	Box 589
Trinidad .....	174	J. J. McCluskey.....	313 E. Topeka Av.
Total membership .....			2,497
Ladies' auxiliaries .....			932
			<hr/> 3,429

## ORDER OF RAILWAY CONDUCTORS

Location	Membership	Secretary	Address
Alamosa .....	45	E. M. Paulin.....	Box 404
Canon City.....	20	A. H. Smith.....	115 Macon Av.
Colorado Springs.....	85	B. L. Beynon.....	531 East Platte Av.
Denver .....	397	F. D. Elliott.....	422 Exchange Bldg.
Durango .....	20	B. Gogarty.....	1115 4th Av.
Grand Junction.....	65	A. F. McCabe.....	403 Ouray Av.
Leadville .....	30	D. Daly.....	120 E. 12th St.
Pueblo .....	170	B. F. Princes.....	115 E. Evans
Salida .....	90	A. L. Paul.....	Salida
Sterling .....	...	F. A. Ayres.....	316 Poplar St.
Trinidad .....	85	W. J. Murray.....	514 E. 1st St.
Total membership .....			1,032
Ladies' auxiliaries .....			720
			<hr/> 1,752

ORDER OF RAILWAY TELEGRAPHERS

This order is organized by System Divisions, each division covering a railroad line, all members employed on the line belonging to that particular division.

Members in			
System Division	Colorado	Secretary	Address
A. T. & S. F.....	50	L. A. Tanquary.....	Pueblo
Burlington .....	43		
C. & S.....	70	C. L. Cheney.....	935 17th St.
D. & R. G.....	275	A. E. Roberts.....	Station A, Pueblo
Midland .....	40		
Rock Island.....	...		
Union Pacific.....	130		
All other roads.....	75		
	—		
Total .....	683		

RECAPITULATION

	No.	Membership
Central labor councils.....	17	.....
Trades unions .....	282	20,213
Railroad unions .....	62	6,772
Woman's auxiliaries .....	...	6,867
	—	—
Total .....	361	33,852

CONDITION OF ORGANIZED WORKERS, WITH SUGGESTIONS FOR IMPROVEMENT

Schedules were sent out to the various labor unions, asking for reports upon the number of members unemployed during the quarters of the year; time; cause of strikes, if any, and number of members involved, together with time and amount of wages lost; the number of members incapacitated through accidents, and number killed while pursuing their vocation; also by what legislation conditions might be improved.

The answers to these queries are here appended:

BAKERS

Had 16 per cent unemployed during the second quarter of the year, 14 the third, and 9 the fourth quarter, caused by the

STATE LABOR ORGANIZATION REPORTS

AVERAGE TIME WORKED, HOURS OF LABOR, WAGES, CONDITIONS AND BENEFITS IN 1911

AVERAGE TIME WORKED

Organization	Location	Days		Hours		WAGES PAID		Opportunity			BENEFITS PAID		Members Insured (Per Cent)
		Month	In Week	Per Day	Per Hour	Per Week		Increase	for Employment Over 1909	on Sickness Weekly	on Death (Dollars)		
						Male	Female						
Bakers .....	.....Denver	12	6	10	...	\$17.00	....	....	Dec.	\$7.00	75-350	80	
Barbers .....	.....Colorado Springs	12	6	10	....	20.00	....	....	Dec.	....	60-500	..	
Barbers .....	.....Denver	12	6	10	....	16.00	....	\$1.00 Week	Dec.	6.00	75-600	50	
Barbers .....	.....Florence	12	6	10	....	16.50	....	....	Dec.	6.00	100-300	85	
Barbers .....	.....Fort Collins	12	6	10	....	15.00	....	....	Dec.	6.00	75-600	85	
Barbers .....	.....Grand Junction	12	6	10	....	17.50	....	....	Inc.	6.00	75-600	87.6	
Barbers .....	.....Pueblo	12	6	10	....	18.00	....	....	Inc.	10.00	75-500	..	
Blacksmiths .....	.....Denver	12	5	8	\$0.41	....	....	.01 Hour	Inc.	....	.....	60	
Rollermakers .....	.....Trinidad	11	6	8	....	22.00	....	....	Dec.	....	100	27	
Bookbinders .....	.....Colorado Springs	12	6	8	..	22.00	..	....	..	....	100	3	
Bookbinders .....	.....Denver	11	6	7	....	23.00	....	3.00 Week	Dec.	....	75	75	
Bricklayers .....	.....Alamosa	3	5½	8	....	26.10	....	..	Dec.	....	100-300	30	
Bricklayers .....	.....Denver	12	5½	8	....	33.00	..	....	....	....	100-350	..	
Bricklayers .....	.....Fort Morgan	4	5½	2	.75	....	....	....	....	....	250-350	9	
Bricklayers .....	.....Pueblo	8	5½	7-8	..	33.00	....	....	....	....	150-350	..	
Broommakers ..	.....Pueblo	9	6	9	.30	....	....	.06 Hour	..	....	.....	100	
Carmen, Railway .....	.....Colorado Springs	12	6	9	.25½	....	....	.02 Hour	Dec.	....	.....	50	
Carmen, Railway .....	.....Leadville	12	6	9	.23	....	....	....	Dec.	....	.....	100	
Carmen, Pueblo .....	.....Pueblo	12	6	9	.23	....	....	.01 Hour	Dec.	....	.....	90	
Carpenters .....	.....Canon City	10	5½	8	....	19.25	....	....	Dec.	....	200	30	
Carpenters .....	.....Colorado City	9	5½	7-10	.63½	....	....	....	Dec.	4.00	50-200	80	
Carpenters .....	.....Colorado Springs	9	5½	8	....	27.00	....	....	Dec.	4.00	50-200	15	
Carpenters .....	.....Cripple Creek	..	..	..	.60	....	....	....	..	5.00	250	..	
Carpenters .....	.....Denver	7	5½	8	.60	....	....	..	Dec.	....	200	80	
Carpenters .....	.....Leadville	6	5½	8	.60	....	....	..	Dec.	....	60-400	25	
Carpenters .....	.....Monte Vista	8	5½	8	.60	..	....	....	Dec.	....	250	50	
Carpenters .....	.....Pueblo	10	5½	8	.65	....	....	....	Dec.	....	200	95	
Carpenters .....	.....Trinidad	9	..	8	.65	....	....	....	Dec.	7.00	250	..	
Cement Workers ..	.....Denver	6	5½	8	.68 2-3	....	....	....	Dec.	....	100	60	
Cigarmakers .....	.....Denver	10½	5½	8	.10	....	....	....	Dec.	..	50-250	100	
Cigarmakers .....	.....Pueblo	12	..	8	....	16.00	....	....	..	5.00	50-650	100	
Conductors, Railroad .....	.....Colorado Springs	12	..	By trip	....	By mile	....	10 P. C.	Dec.	....	1,000-3,000	100	
Conductors, Railroad .....	.....Denver	12	..	By trip	....	By mile	..	10 P. C.	Dec.	....	1,000-3,000	100	
Conductors, Railroad .....	.....Leadville	12	..	By trip	....	By mile	....	10 P. C.	Dec.	..	1,000-3,000	100	
Conductors, Railroad .....	.....Trinidad	12	..	By trip	....	By mile	....	1.00 Week	....	....	.....	..	
Clerks, Retail .....	.....Alamosa	12	6	10	..	No Wage Scale	....	....	Inc.	....	.....	33	
Cooks .....	.....Denver	10	6	11	.40	*20.00	*12.00	..	Dec.	5.00	50	75	
Cooks .....	.....Silverton	8	7	12	....	*27.00	..	....	Dec.	8.00	90	3	
Electrical Workers .....	.....Denver	8	5½	8	.60	27.50	..	....	Dec.	....	100-300	75	
Elevator Constructors ..	.....Denver	9	5½	8	.66½	....	..	....	Dec.	....	.....	..	
Engineers, Locomotive .....	.....Colorado City	10	By trip	14	.61½	30.00	..	....	Dec.	6.00	.....	95	
Engineers, Locomotive .....	.....Denver	..	By trip	..	....	....	....	3.50 Week	Dec.	10.00	.....	90	
Engineers, Locomotive .....	.....Denver	12	By trip	..	5.00 per 100 miles	..	....	.50 Hour	Inc.	..	By Premium	100	
Engineers, Locomotive .....	.....La Junta	12	By trip	10	..	25.00	....	.05 P. C.	....	....	1,500-4,500	100	
Engineers, Locomotive .....	.....Trinidad	..	By trip	..	1.50 per 100 miles	..	....	....	Dec.	....	.....	100	
Firemen and Enginemen.....	.....Salida	10	By trip	12	20.00	..	....	3.33 Week	Dec.	....	.....	99	
Firemen, Locomotives .....	.....Pueblo	..	By trip	..	....	....	....	....	Dec.	....	500-3,000	96	
Engineers, Stationary .....	.....Colorado Springs	..	7	10	50	21.00	....	....	Inc.	....	.....	..	
Garment Workers .....	.....Denver	11	5½	8	....	18.00	10.00	....	Dec.	....	.....	..	
Granite Cutters .....	.....Pueblo	9	5½	8	.62½	27.50	....	....	....	....	100	75	
Granite Cutters .....	.....Salida	12	5½	8	.57	25.00	....	....	Inc.	....	50-200	50	
Hod Carriers .....	.....Grand Junction	10	4½	8	.44½	....	....	....	Dec.	....	50-100	75	
Leather Works and Horse Goods .....	.....Pueblo	11	6	9	.35	21.00	..	....	Dec.	6.00	40-100	100	
Lithographers, etc. ....	.....Denver	12	6	8	.61	35.00	....	....	....	....	500	100	
Machinists .....	.....Colorado City	12	6	8	.40	....	....	....	....	....	50-100	400	
Machinists .....	.....Denver	8	6	9	.39	....	....	.02½ Hour	....	4.00	50-200	75	
Machinists .....	.....Pueblo	10	5	9	.42	....	....	.02½ Hour	....	6.00	50-200	50	
Mallers, Newspaper .....	.....Denver	12	7	12	.37	16.60	..	....	....	....	70-200	50	
Marble Cutters and Setters.....	.....Denver	9	5½	8	....	27.50	....	....	....	....	.....	50	
Marble Helpers .....	.....Denver	9	5½	8	....	17.50	....	....	....	....	.....	50	
Miners, Coal .....	.....Lafayette	4	6	8	By ton	25.00	....	On Strike	....	....	100	2	
Miners, Coal .....	.....Louisville	4	6	8	By ton	25.00	..	On Strike	....	....	.....	..	
Miners, Coal .....	.....Rockvale	..	..	..	.29½	....	....	....	....	....	.....	None	
Miners, Coal .....	.....Superior	4	6	8	By ton	....	....	On Strike	....	....	.....	..	
Miners, Metal .....	.....Leadville	10	7	8	....	21.00	....	....	Dec.	7.00	80	30	
Miners, Metal .....	.....Ophir	10	7	8	....	21.00	....	....	Dec.	8.00	90	5	
Molders, Iron, etc. ....	.....Denver	5	5½	9	.50	22.00	....	....	....	6.40	.....	66	
Musicians .....	.....Colorado Springs	By engagement			1.00	....	....	....	....	6.00	.....	..	
Musicians .....	.....Fort Morgan	By engagement			1.00	....	....	....	....	....	.....	60	
Musicians .....	.....Silverton	By engagement			1.00	....	....	....	....	....	.....	95	
Moving Picture Operators.....	.....Denver	12	7	8	..	20.00	....	....	Inc.	....	.....	50	
Painters .....	.....Denver	9	5½	8	.60	22.00	....	....	Dec.	6.00	100-300	..	
Painters .....	.....Durango	6	6	8	.60	21.00	....	....	Dec.	6.00	100-300	..	
Painters .....	.....Sterling	9	6	8	.40	19.20	....	....	Dec.	6.00	100-300	16	
Photo Engravers .....	.....Denver	12	6	8	....	26.00	....	....	Inc.	....	100	50	
Plasterers .....	.....Denver	9	5½	8	....	30.25	....	....	Dec.	6.00	300	60	
Plumbers .....	.....Alamosa	12	5	8	.62½	30.00	....	6.00 Week	....	6.00	100	75	
Plumbers and Gasfitters.....	.....Denver	9	5½	8	.62½	27.50	....	....	Inc.	6.00	100	60	
Plumbers and Steamfitters .....	.....Grand Junction	9	6	8	.62½	30.00	....	....	Dec.	6.00	100	33	
Pressmen .....	.....Colorado Springs	12	..	8	....	25.00	....	2.00 Week	....	....	100	75	
Pressmen, Job .....	.....Denver	12	5	8	....	21.50	....	....	Dec.	....	100	..	
Press Assistants .....	.....Denver	9	6	8	....	16.00	....	....	Dec.	....	100	20	
Sheet Metal Workers.....	.....Colorado Springs	8	6	8	....	27.00	....	....	Dec.	6.00	100	30	
Sheet Metal Workers.....	.....Denver	7	5½	8	.66½	....	....	....	Dec.	....	100	80	
Stage Employees, Theatrical.....	.....Pueblo	9	7	..	.60	22.50	....	....	Dec.	....	.....	..	
Steamfitters .....	.....Denver	7	5½	8	.62½	27.60	....	....	Dec.	6.00	100	60	
Steamfitters, Helpers .....	.....Denver	7	5½	8	....	19.50	....	....	Dec.	6.00	100	35	
Steamfitters, Railroad .....	.....Denver	10	6	8	.40	21.00	....	....	Dec.	....	50-100	60	
Stereotypers and Electrotypers.....	.....Denver	12	6	8	....	26.60	....	....	Inc.	....	100	90	
Street Railway Employees.....	.....Colorado Springs	12	7	10	.27½	....	....	....	....	....	100-800	..	
Tailors .....	.....Pueblo	10	6	10	.30	18.00	....	....	Inc.				

\* With board.





fact that the non-union shops worked longer hours for the same pay. One strike occurred, which was unsatisfactorily settled by compromise. No members injured or killed.

#### BARBERS

Report dull business because of safety razors and general business depression, which has caused a loss of membership. About 2 per cent out of work during the year.

#### BLACKSMITHS

Seven members of the Denver union on strike by reason of the Union Pacific shopmen's strike. Benefits paid to them, \$252; wages lost, \$1,674. Strike still on. No other members out of employment, and business increased through increased railroad transportation. No members injured or killed.

#### BOOKBINDERS

Denver union reports 95 per cent of members unemployed during the year, caused by work being done out of the city and the lack of people to demand home products. Demands were made upon employers for increase of wages, with following result: September 1, 1910, raise from \$20 to \$22 per week; September 1, 1911, \$23 per week; September 1, 1912, \$24 per week. Contract made to run till September 1, 1914. Suggested legislation: A law to require all schoolbooks for the state, counties, and cities to be printed and bound in the state, for the protection of the people who spend their money in this state.

#### BROOMMAKERS

Report diminished business because of the large amount of convict-made brooms being shipped in from other states. Want an amendment to the convict-labor statute making the same effective in goods shipped in from other states.

#### BRICKLAYERS AND MASONS

Chances of getting employment poor, through dull times, lack of material, and bad weather. About 50 per cent out of employment during the year. Occupation not extra hazardous except on high buildings. Six members injured. Legislation suggested compelling fireproof or near fireproof buildings in certain districts. Building inspectors in towns as well as cities compelling better scaffolding and more substantial placing of carpenter work.

#### CARMEN—RAILWAY

Ten per cent out of work during the year. Five members injured by accident. Occupation not extra hazardous. Strike

ordered by refusal of Union Pacific, Harriman lines, Illinois Central, and M. K. & T. railroads to give contract with men. Ninety days' work lost by Leadville union because of this. Suggested legislation:

1. To have railroad companies furnish car shops, where repair work can be done in stormy weather.
2. To have the switches leading to repair tracks locked with other than switch locks, the key to be in the hands of foreman having charge of the work; to exclude switch engines from repair tracks while men are working under cars.
3. To have all car inspectors employed show at least two years' experience on car work, and pass an examination as to their knowledge of air brakes, hand brakes, and general condition of cars.

#### CARPENTERS

Fatal accidents, one; accidents, fifty-three. General depression in this line of work reported from all over the state. Members out of employment range from 10 to 50 per cent according to locality. Denver business very bad through slump in building, and unfavorable weather. Legislation suggested: More stringent employer's liability law. By making employers personally liable, they would give more supervision to scaffolding, hoisting appliance, more safety guards around machinery in planing-mills, reduction works, etc., and about all the arrangements of machines, floor space between, etc.

#### CEMENT WORKERS

Report number of members out of work, 90, 90, 75, and 50 per cent for the quarters in 1911, caused by bad weather and no business. Recommend laws for the protection of men working on buildings, and strict enforcement of the same.

#### CIGARMAKERS

Work on the piece scale—a certain amount for 100 or 1,000 cigars manufactured. They report no increase in wages or conditions, and that manufacturers exact more from workmen now than formerly. In consequence the men are not making so much. Members unemployed during the quarters, 8, 10, 5, and 10 per cent, caused by people patronizing trust stores, and by the greater use of pipes and cigarettes. Opportunity for employment decreased because of the concentration of wealth in the hands of a few. Non-employment in other lines of industry affects all lines also. Denver union reports a strike in the Cuban Cigar Factory, caused by the demand of the union for the reinstatement of three workers. Fifty-three members involved and strike lasted twelve days. Wages lost, \$1,908; strike benefits paid, \$600. Strike was successful.



## COOKS—PROFESSIONAL

Condition of employment affected by similar conditions in other lines. Very dull during 1911. Percentage out of employment during quarters, 15, 10, 10, 15; an unusually large percentage for the second and third quarters. Legislation suggested: Eight-hour day. Claim is made that their occupation is just as injurious to health as are mining and other avocations so declared by law. Also, an extension of the factory inspection act, compelling the proper ventilation of kitchens and inspection thereof. Number of accidents caused by use of defective utensils, 10. Also a law is recommended to abolish private employment offices, which are a constant menace to the steady employment of members, and a graft upon hotel and restaurant help in general.

## CONDUCTORS—RAILWAY

Occupation extra hazardous. Number killed, three; injured, six. About 10 per cent of members out of employment during the year, through dull business and consolidation of train tonnage caused by use of larger locomotives. Wages increased about 10 per cent by arbitration. Legislation necessary: Laws compelling more strict application of safety appliances.

## ELECTRICAL WORKERS

Classed as extra hazardous occupation. Twelve members injured, none fatally, during 1911. Chances of employment diminished because of open-shop competition. Members out of employment, 15 per cent in summer and 30 per cent in winter. Workman's compensation law demanded.

## ENGINEERS AND FIREMEN—LOCOMOTIVE

Extra hazardous occupation. Fifty-three injured and four killed during the year. Business dull in 1911, caused by general depression; increased in 1912 by reason of moving heavy crops. Increase in salary received through successful negotiation with employers, showing the increased cost of living. Legislation wanted: Law to compel railroad companies to install positive block signals, and equip all locomotives with electric or high-power head lamps; prevention of steam leaks on engines; limiting length of freight trains to where hand and lamp signals can be readily interpreted from either end of train. No freight train should be allowed to run which cannot get in on any auxiliary track provided for passing purposes, and have at least three car lengths of unoccupied passing track at either end for variation in stops.



Present United States mail cranes are very unsafe. Law should compel them to be set back far enough so that an engineer would be in no danger of being hit by them.

Law prohibiting an engineer from remaining on an engine over ten continuous hours.

State law compelling railroads to have night track-walkers, and switch lights on all switches.

Inspection by state of all tunnels; concrete and iron bridges, properly graded, to be used exclusively; fences kept in condition to keep live stock off the track; and gates on all public crossings.

#### ENGINEERS—STATIONARY

Business increased because of the installation of more plants. Three injured, none fatally. Occupation not extra hazardous. Recommendation for universal eight-hour day.

#### GARMENT WORKERS

Worked only five days a week during 1911, because of dull business.

#### GRANITE CUTTERS

Increased business by Salida union because of demand for Salida finished granite. Other sections of state report diminished business through lack of building. Recommend law compelling the installing of suction fans in working sheds, to stay the ravages of their worst enemy—"granite-cutters' consumption;" enactment of a workman's compensation law.

#### MACHINISTS

Report twenty-five accidents, one fatal. Denver union reports an average of 30 per cent out of work during the year. This union had a strike at the Rock Drill and Machine Company, and of those members working for the Union Pacific Railroad, on account of the 'shopmen's strike. They had fifty-six members out for twenty-four months, with loss of wages of \$75,515; strike benefits paid, \$6,232. Rock Drill strike was compromised; Union Pacific strike still in progress. An eight-hour day was gained on the Denver & Rio Grande Railroad system, without strike.

#### MOLDERS

Report a few members burned. Occupation not extra hazardous when shops are properly equipped. Desire a law compelling the installation of suction fans to remove smoke and dust from shops in cold and damp weather, the better heating of shops in winter, and the installing of bath- and dressing-rooms. Business dull.

#### MUSICIANS

Work by the engagement, or \$1 an hour. Work slack in 1911 because of business depression. Desire a more even distribution

of the wealth of the country, which, they believe, could be brought about by dissolving trusts and monopolies, government control of public corporations, and a fair revision of the tariff.

#### MINERS—COAL

Report only four men injured and none fatally, because of the fact that the miners in the northern fields were not working, being on strike. (Strike situation covered in other pages of this book.) Miners to the number of 125 involved in strike from April 1, and still on; 39,125 days' work lost; \$48,906.25 wages lost, and \$46,000 paid in strike benefits. Legislation wanted: Eight-hour workday; strict enforcement of mining laws; safety law with following provisions: proper ventilation, sprinkling roads, check weighman on tippie, escape shaft far enough away from main shaft to enable men to get away in case of explosion, etc.; also ladder and cage to hoist men with; watchman placed along hauling-way when men are coming from work, to safeguard them from being hit by cars, etc.; mines properly drained; good and sufficient ladders in shafts, with platform every fourteen feet; shafts kept in good order, and free from ice and loose strata; state mine inspectors to be elected by the people; bi-monthly pay-day; workman's compensation act.

#### MINERS—METAL

Occupation extra hazardous; about 102 injured and twenty-five killed in 1911. Has been no increase in wages. Business dull because of contracts expiring with smelters, no mining, and smelter charges too high; 55 per cent of miners out of work. Legislation desired: Workman's compensation act; mining laws amended to the effect that upon complaint of at least two reliable and practical miners (whose names shall be kept inviolate), in any mine employing five or more men, the inspector shall be required to investigate the condition of such mine, and report his findings to proper officer, and if found in a dangerous condition, or operating in violation of law, such operator or owner shall be fined in such sum as the courts may deem proper.

#### PLASTERERS

Had four members injured during the year. Suggest a building inspectors' law, who shall see that work is properly done according to architect's specifications, and that all scaffolding is properly erected. Business bad because of general depression in building industry. Percentage of members out of work by quarters: 20, 35, 45, 75.

#### PHOTO-ENGRAVERS

Denver union reports increase of work because of opening of another shop. No increase in wages except by individuals through



superior workmanship. Desire a strict enforcement of sanitary regulations now in force.

#### PAINTERS—HOUSE

Report working only half time during 1911, through dull business.

#### PLUMBERS, GASFITTERS, AND STEAMFITTERS

Twenty-three members injured during 1911; none fatally. Average 33 per cent of members out of work through dull business and continuance of building trades strike in Denver; 5,000 days' work lost through this strike, with loss to men of \$20,000 in wages; \$12,000 paid in strike benefits. The strike or lockout was caused by reason of the master-builders refusing to recognize the card of the Building Trades Council of Denver; still on, though modified by the council giving affiliated unions the right to make separate contracts with employers. Plumbers desire a state plumbing inspection law, and better enforcement of the city ordinances requiring the inspection of plumbing; also state law requiring the examination and licensing of all plumbers, and state inspection of all work. Sewer gas causes more fever than any other one cause in Colorado. Steamfitters desire a law compelling proper inspection of all steam pipes, in power plants especially, which will raise the standard of mechanics and decrease the number of fatalities.

#### PRESSMEN AND ASSISTANTS

Two to 4 per cent out of employment during year through business stagnation and work being sent to other cities to be done. Assistants won a strike of one day only, and gained an increase in wages of 50 cents per week. Desire strict enforcement of sanitary regulations in the shops.

#### SHEET METAL WORKERS, TINNERS, ETC.

Business very dull in Colorado Springs. Report 30, 90, 100, and 70 per cent out of employment in the four quarters of the year. Denver reports 15, 15, 10, and 15 per cent in the same quarters. The building trades strike affects this union, but satisfactory agreements have been reached with most of the employers. Desire a law for proper protection of mechanics while working on buildings, and workman's compensation act.

#### STEREOTYPERS AND ELECTROTYPERS

Business increased by establishment of more newspapers. Gained an increase of wages by conciliatory negotiation. Desire rigid enforcement of sanitary regulations.

#### STREET RAILWAY EMPLOYEES

Colorado Springs had five members injured; none fatally. Desire a law doing away with running boards, and compelling all

cars to have center aisles; also to compel the heating of vestibules when necessary.

#### TELEGRAPHERS—RAILROAD

Chances of employment diminished slightly. Have had no strikes, but gained a slight increase in pay through negotiation. Eight-hour workday desired. At stations where but one man is employed he is required to work twelve hours per day, which is excessive where train orders are handled. No telegrapher concerned in the movement of trains should work to exceed eight hours per day. Public safety demands this, and sixteen hours should elapse before he is again required to work.

#### TRAINMEN, RAILROAD BRAKEMEN, AND FREIGHT CREWS

One lodge reports fifteen injured; none fatally. Have gained an average increase in wages of from \$98.39 to \$165 per man, through negotiations and high cost of living. Business diminished in 1911 through general depression. Men work from four to sixteen hours per day, according to trip. Switchmen report decreased work through the use of larger cars and locomotives. Three members injured; none fatally. Desire laws compelling railroads to employ full train crews, workman's compensation act, blocking frogs and switches, and keeping track clear of obstructions, such as coal, coke, ore, and broken parts of cars; and an eight-hour day.

#### TYPOGRAPHICAL UNIONS

Eight unions returned reports, which is the largest number received from any one craft. Report one member injured in line of duty during 1911. Fort Collins reports an increase of \$7 per week per member since the organization of the union in 1905. Denver and Pueblo also report increase in wages through the increased cost of living, without strike and through negotiation with employers. Demand a strict enforcement of the factory inspection act. Printing-offices are declared to be very unsanitary and breeders of consumption. Better ventilation and light required.

#### WAITRESSES

Upon failure of the last legislature to enact an eight-hour law for women workers, the Denver union made demand upon proprietors of restaurants for it, and gained it in all union restaurants.

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#### INDIVIDUAL WAGE-EARNERS' REPORTS

Personal information from wage-earners is of greater value than estimates based on general reports, for the purpose of showing the conditions under which they labor, the amount they earn



and the manner in which they live, their social relations, and the laws required to better their conditions. With the view of obtaining first-hand information upon these subjects, schedules for individual wage-earners were prepared and sent out to 100 people following different occupations, asking these questions and leaving a large margin of space for invited comment. Replies were received from only twenty-nine people, which is much less than was anticipated, but, for the information of the public, a synopsis of these replies is appended:

No. 1—Machinist. Married. Has six persons depending upon him for support. Has worked steadily during year, and earned \$1,456. Has spent: for food, \$500; fuel, \$40; clothing, \$60; sickness, \$20; rent, \$192; sundry expenses, \$500; total, \$1,312. Carries old-line life insurance of \$2,000, at an annual cost of \$60. Desires a universal eight-hour-per-day work law, rigid enforcement of the factory inspection law, and a workman's compensation law, as he is engaged around dangerous machinery.

No. 2—Newspaper mailer. Earns about \$1,200 a year. Has three depending upon him for support, and is insured in old-line life for \$1,000, at annual cost of \$27.07. Does not own a home, and has saved or invested about \$200 in the last two years. Works under unsanitary conditions, and suggests that workshops should have sanitary drinking fountains in them. Desires sanitary conditions in printing-offices, the organization of all unskilled workers, and the establishment of universal eight-hour workday. The Bureau of Statistics can best help the wage-earners of this state by preventing newspapers from printing untrue reports of the condition of the state that bring thousands of workers here, when there are thousands out of work now.

No. 3—Printer. Belongs to Typographical Union. Age, fifty-four, and married. Has one depending upon him for support. Works eight hours a day, and has lost an average of twenty days a year through holidays and slack business. Earned \$1,240 in 1911. Spent: \$350 for food; clothing, \$150; sickness, \$25; rent, \$240; incidental expenses, car fares, etc., \$125; total, \$976. Carries fraternal life insurance, \$2,000, at a cost of \$36 per annum. Does not own home. Has invested in two years \$300 in school bonds. Advocates a shorter workday in the way of legislation to benefit the workers, and that a strict enforcement of labor laws is the best work that can be done by the Bureau of Statistics to assist the wage-earners of the state.

No. 4—Baker, Pueblo. Age, twenty-five, and married. Has two depending upon him for support. Works ten hours per day, and lost three weeks' work in the year. Earned \$1,050 in the year. Belongs to union, and it has increased the wages of its members \$1 per week. Sanitary conditions are fair where he is employed, but lack of sunlight leads to consumption among bakery workers. Spent \$300 more than he earned in the year,

through sickness in his family. Carries accident policy of \$50 per month, at cost of \$18 a year; also life policy, \$200, at cost of \$28.80. Wants a law doing away with night work in bakeshops, eight-hour workday, and better sanitary regulations. Under Remarks he says: "In the State of Illinois there are laws that regulate bakeshop conditions, and if we could have similar laws enacted, it would be of great benefit to the bakery workers. Night work is an ancient rule in our craft and is unnecessary. There is a national law in Italy and other nations against it. The bakery workers are subject to throat and lung trouble, caused by inhaling flour dust; also, there are few bakers that are not troubled with broken blood vessels in their limbs, and rupture, caused from standing long hours in hot bakeshops on cement and wood floors. An eight-hour workday would do away with this. We are fighting for this, and hope eventually to win."

No. 5—Blacksmith's helper. Lost ten days' work in the year through sickness. Earned \$744. Is married, and has three depending upon him. Works around dangerous machinery, which is well guarded, and sanitary conditions are good. Spent \$300 for food, \$37.50 for fuel, \$72.75 for clothing, \$173 for rent, and lost \$18 through sickness. Carries no insurance and does not own his home, but invested \$400 in furniture, which he in part still owes for. Thinks that the best legislation to help the workers would be the state ownership of coal mines, and railroad reduction in freight rates on raw materials to equal the rate of the finished product. He remarks that "under the present system there seems to be but little help for working-men. Now, to me, a railroad man, a reduction in freight rates would help a great deal, but if that occurs we can get no raise in pay, but rather a reduction, as dividends must be paid on overcapitalized stock."

No. 6—Railroad clerk. Does not belong to a union. Earns \$75 per month. The average wages is \$60. Earned \$400 in the year, as he was unemployed most of the time. Wages in his line have not increased because "the railroads only increase the wages of the unorganized about once in every 100 years, and he is not that old. Has lost many positions trying to organize the railway clerks, but they seem hopeless." He is one of three boys who collectively support their parents. All his money was given his mother, who has put what she could into a home for the family. Carries fraternal life insurance of \$700, at a cost of \$7 per annum. Believes in government ownership of railways, and that the bureau can best serve the workers by educating them to vote the Socialist ticket, to which he adds: "I know you won't do that, but that's my answer just the same."

No. 7—Cook, professional. Age, thirty-six. Works eleven hours per day and, being a union man, six days per week. Earns \$3.50 a day and board when working. Complains of insufficient ventilation in the average kitchen, and that "architects have



about as much conception of the ventilation of a kitchen as a cook has of theosophy." Single man, and pays \$15 per month for room. Is member of fraternal lodge, which pays \$10 per week for sick benefit, and \$100 on death. In addition to this, the union pays \$5 per week, and \$50 at death. Has saved about \$100 cash during the year. Wants an eight-hour workday in the way of legislation, and adds: "The work in heated, illy ventilated kitchens is just as injurious to health as is work in mines or smelters." The Bureau of Labor can best serve the workers by having the power to bring suits against violators of labor laws, without having to wait upon the pleasure of district attorneys, who are often corporation tools. Remarks that "laws should be passed and enforced to curb the rapacity of the trusts, which should be prosecuted for usury the same as are money-lenders when they extort extortionate dividends on capital invested, or water. There is no reason for sugar being sold for 8 or 10 cents per pound in this state, when C. S. Morey testified before the United States government Sugar Trust probe that the average cost of production was but 2½ cents in Colorado. The same applies to nearly all necessities of the people, and is the direct reason, with dividends paid on watered stock, why the poor are getting poorer and the rich richer all over the world. A readjustment of the profits of industry is demanded, and if it is not soon forthcoming, the common people will take it—by force if no other way is left to them." Averages nine months' work in the year, "which is three months more than he wants to at that kind of work." Advocates enactment of a law abolishing private employment offices, "which are in the loan-shark class," and are doing more to make tramps than any other one thing.

No. 8—Laundry worker, female, Pueblo. Age, twenty-three. Works nine hours a day. Lost two days in the year from sickness. Gets top wages as skilled employe—\$10 per week. Has received a raise of 50 cents per day "by faithful service." Belongs to union. Works around dangerous machinery, which is properly guarded. No accidents in that plant. Fire-escapes; sanitary conditions good; separate toilets for each sex provided. Supports herself only. Paid out for clothing, \$150; sickness, \$20; rent, \$80; sundry expenses, \$40. Carries no insurance and wants the eight-hour law for women (since adopted).

No. 9—Carpenter. Age, forty-eight; married. Has a family of eight depending upon him for support. Works eight hours per day, at a wage of 45 cents per hour. Has been unable to work six months in the year, from sickness and through cold weather and dull times. Spent \$500 for food; fuel, \$50; sickness, \$100; sundry expenses, \$145. Pays fire insurance of \$25 a year for \$6,000 policy on property worth \$12,000, of which he has an equity of \$8,000, as rental on this property of \$800 per year. Desires universal eight-hour workday of five days a week.

cheaper money, taxation of equity in home or property only. The Labor Bureau can best assist the workers by pointing out unjust and unfavorable conditions to legislative bodies, and insisting on the removal thereof. Remarks: "The thing that causes the most worry, the most hardship, and is the chief cause of poverty and crime, is enforced or involuntary idleness. The state should provide work for all who want work. A great help to the working class would be money at a lower rate of interest. Building and general improvements would then be carried on on a larger scale. The farmers would have better homes, extend their improvements, and so provide more and better-paid labor. I think the government should issue original bills to at least half the value on farms and all other property insured valuable considerations, just the same as it does on gold. There is no reason why a farm or insured house is not as good security as a piece of metal that is yellow. This money could be loaned at cost, and would harm nobody but the loaning fraternity, and since they neither produce nor handle any of the necessities of life, the community and state would lose nothing by their demise. A postal bank of issue is of far greater need than the postal savings bank, because when a man has savings he is not in any danger, but when he is jobless, or paying from 10 to 20 per cent interest to carry him through a spell of sickness, that is what makes calamity. Money at cost and never-failing employment will comfort us in mind and body."

No. 10—Upholsterer. Married; age, forty-five. Family of two. Earns \$21 a week, full time. Very dull business and loss of employment for three months. Wages increased 25 cents per day, through organization and increase in price of necessities. Sanitary conditions in workshop good. Pays \$18 a month rent. Has had much sickness. Has "been lucky to buy any clothing." Insured in fraternal life for \$1,000, at cost of \$15 a year. Furniture insured for \$500, at cost of \$1.50. The way to improve conditions in his line is for the people to buy home-made goods and keep mechanics employed that are here. He says: "For several years I have kept track of the goods shipped into Denver from furniture firms in the East, good and bad stuff, and it amounted to \$175,000. Most of it comes from Chicago and Grand Rapids. If there was more of it made here, we would have more houses and families in good old Denver. Most of the merchants are advocating home industries and buying eastern-made goods by the carloads. Fifteen years ago there were sixty-five members in the union; now there are only twenty-five; which does not look good. We know the cause, and so do you."

No. 11—Carpenter. Age, fifty; married. Has four depending upon him for support. Earned \$1,023.60, and spent for living expenses \$1,086, showing that he went behind during the year, caused by no work part of the time. Building industry slack, and a large number of carpenters out of employment. Says that about



3 per cent of carpenters are injured during a given year. Desires the enactment of a workman's compensation act.

No. 12—Machinist. Age, thirty-four; married. Three depending upon him. Works eight hours a day. Was idle twenty-five days, and earned \$940. Works around dangerous machinery, that is fairly well guarded, and sanitary conditions are fairly good. Works in railway repair shop, and in winter-time, when doors are closed, the smoke from locomotives is very bad. Carries old-line life insurance for \$1,000, at annual cost of \$49.30; weekly accident policy of \$18 if injured, at cost of \$30 per annum. Owns a home worth \$2,200, which is clear. Has not saved anything the last two years. "Could not purchase a respectable living for my family on my earnings." He wants "legislation that would give me all my labor produces and stop the capitalists from robbing me of four-fifths of what I produce. I do not know the powers of your department, but use whatever power you have, in whatever way you can, in the interest of the working class. I am filling out the above blank off-hand, as best I can. I realize that such statistics are valuable, but I do not expect any relief under the present form of society; not until the working class, through their own political party, take possession of the powers of government."

No. 13—Carpenter, Leadville. Age, sixty-two; single. Works eight hours a day, and gets 50 cents per hour. Out of employment six or seven months in the year, because of the smelter trust being too exacting on mining industry, causing loss of mining. Earned \$500 in year, and spent \$450 for living. Owns no home. Suggests, in way of legislation to help the workers, a "labor lien law, with penalty of imprisonment for non-payment of wages except in cases of failure or bankruptcy—prima facie robbery." The bureau can best assist the wage-earners by "showing the approximate number of wage-earners robbed annually of wages."

No. 14—Barber. Age, fifty-eight; married. Has five depending upon him for support. Works ten hours a day for \$15 a week. Lost three days' work in the year. Carries accident policy of \$50 per month, at cost of \$1.25 per month; fraternal life, \$1,000, and fire insurance, \$700. Has made no savings during year. Wants the barber law strengthened in state and nation. Labor Bureau can best assist the workers by enforcing the state laws and letting no one escape because he has a pull or money. "Show no favorites. Our state laws are not enforced except against the poor working-man. The wealth is not compelled to abide by the laws of the state. Corporation coal companies, etc., violate all laws on the statute-book."

No. 15—Musician. Age, thirty-nine; married. Five depending upon him. Gets \$1 an hour when he works. Spent in year: fuel, \$35; clothing, \$100; sickness, \$10; rent, \$150; sundry expenses, \$75; total, \$630. Carries fraternal life insurance, \$3,000, at cost of \$36.60 a year. Owns a home valued at \$1,700, and carries fire insurance on it of \$700. Has made no savings during

year. Suggests in way of legislation: reduction of tariff, regulation of freight rates, and general measures to let the people rule. Believes the Labor Bureau can best help the workers "by working along the lines now mapped out by the bureau. Believe you are now doing your duty."

No. 16—Locomotive engineer, Trinidad. Age, thirty-one; married. Four depending upon him for support. Works from ten to sixteen hours per day. Was off about sixty-five days of his own accord. Gets \$5.55 for run of 100 miles, which averages a day's work. Earned about \$1,200 during the year. Spent: \$375 for food, \$48 for fuel, \$225 for clothing, \$65 for sickness, \$65 for sundry expenses. Owns his home, worth \$1,500. Carries fraternal life insurance of \$3,000, at a cost of \$48 per annum; accident insurance of \$20 a week, which costs \$28.20 per annum; fire insurance, \$1,000, at cost of \$6 per annum. Has saved or invested in the last two years about \$680. In way of legislation he suggests locomotive headlight law, such as is in force in the States of Texas, Arkansas, and Mississippi. "The employes in the engine service and train service, as well as the public, should be protected with electric headlights on locomotives. It is true that the companies have placed electric headlights on most of the passenger engines, but our freight engines still have the old oil headlights, which will not, when at their best, throw a light over 100 feet, which gives the engineer no chance to see bridges out, or bad track, or stock on track, at night, in time to stop train when running at high speed."

No. 17—Printing pressman, Denver. Age, thirty-six; married. Five depending upon him for support. Works eight hours a day. Earned about \$1,208 in year. Union man. Gained increase in wage of \$1 a week. Proper means of egress are provided where he works, and sanitary conditions are fair, but the air of a large pressroom is very conducive to tuberculosis. Works steadily, and generally saves \$10 a month. Spends for light and fuel about \$60; clothing, \$150; hospital, sickness, and operations, \$143; rent, \$370. Carries old-line life insurance, \$1,500, at cost of \$27.90 per annum; fire insurance, \$500, at \$1.50 per annum. Spends the balance of his wages for food and sundry expenses. Wants the employing printers to provide better ventilation, as during cool weather nearly all pressrooms are closed up tight, so as to facilitate keeping the temperature warm. Thus the employer saves on the cost of fuel and heat, but the workmen suffer for lack of pure, fresh air. The process of printer's ink drying on the newly printed paper takes up nearly all the oxygen that is in the air, which at times causes a "dopy" feeling, which leaves a person as soon as he obtains fresh air. "Statistics will show that my occupation ranks near the top of the list of those having a heavy death-rate from tuberculosis, which is caused principally from the stated cause."



No. 18—Metalliferous miner. Age, forty-one. Four depending upon him for support. Earns \$3.50 a day, and earned \$1,050 last year. Lost thirty days' work through suspension of mining operations. Is a member of the Western Federation of Miners. Does not work around dangerous machinery, but handles explosives, and in the neighborhood where he worked during the year "three were killed in snow-slides, two killed by falling rock, one electrocuted, and one man killed handling explosives. There were also numerous minor accidents, non-fatal." Sanitary conditions in the mine he worked in are good. Spent \$400 for food, \$180 for fuel, \$125 for clothing, \$65 for sickness, \$150 for rent, \$50 for sundry expenses; total, \$950. Carries \$1,000 fraternal life insurance, at an annual cost of \$21.60. Does not own a home and has made no permanent savings. In the way of legislation he desires a bona-fide eight-hour law, workman's compensation act, weekly pay-day law, old-age pension, and state insurance against unemployment. The Bureau of Labor Statistics can best promote the interests of the wage-earners and the people of the state by giving publicity in every way possible to the low standard of wages paid to the unorganized workers, and in many cases to the organized, with figures to show the increased cost of living; the publication of the names of the corporations, department stores, and other institutions which are disbursing dividends at the expense of their employes, and the conditions under which the employes work and are compelled to live.

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#### COMPARISON OF WAGES PAID IN COLORADO WITH THOSE OF TEN YEARS AGO

A comparison of the wages paid to mechanics in the different trades with those of ten years ago furnishes interesting data. When it is considered that the price of commodities, the price of actual living expenses, has increased an average of 60 per cent, it will be readily seen that wages have not even approached that percentage of increase. In fact, in many trades there has been no increase at all, and those that show increases are those that are the more perfectly organized. No other argument is necessary to prove the beneficial effect of labor organizations to the workers.

It must be remembered also that, compared with the increase of the population of the state, the membership of the various unions shows a large decrease in percentage compared with that of 1902. The main reason for this is the fact that at that time capital was not organized to combat labor, as is the case at the present day; and it is advisable at this time to issue a timely warning to capital, that labor is now down to the low condition of making a bare existence. The public schools of this nation are educating the sons and daughters of the workers to a high standard of intelligence, and an educated person will not be content

with a bare subsistence, especially so when it is known that "watered stock" is drawing large dividends from the fruits of their toil. The 100 per cent increase in the Socialist vote of the nation at the 1912 national election alone should be warning enough to thinking people of what may be expected if some measure of relief is not speedily afforded the workers.

Commissioner James T. Smith's report for 1901-1902 shows the following average scale of wages then paid in the given crafts. In the following table this is compared with the report of the same crafts in 1911:

Craft—	Wages		Rate
	1901-2	1911	
Bakers .....	\$ 18.50	\$ 17.00	Week
Barbers .....	18.50	17.00	Week
Blacksmiths .....	3.12½	3.28	Day
Boilermakers .....	20.25	22.00	Week
Bookbinders .....	21.62½	22.50	Week
Bricklayers .....	5.25	6.00	Day
Broommakers .....	2.00	2.70	Day
Car workers (railway).....	3.25	3.42	Day
Carpenters .....	3.37½	4.45	Day
Cigarmakers .....	17.00	16.00	Week
Conductors, railroad .....	125.00	137.50	Month
Clerks, retail .....	11.00	13.00	Week
Cooks, with meals.....	18.50	22.00	Week
Electrical workers .....	21.49	22.50	Week
Engineers, stationary .....	82.50	85.00	Month
Garment workers, females.....	7.25	10.00	Week
Granite-cutters .....	22.00	26.25	Week
Hod-carriers .....	3.16⅔	3.58	Day
Harness-makers .....	20.10	21.50	Week
Lithographers .....	18.00	25.00	Week
Machinists .....	3.00	3.46⅓	Day
Mailers, newspapers .....	16.50	16.50	Week
Marble-cutters and setters.....	22.00	27.50	Week
Miners, coal .....	19.02	25.00	Week
Miners, metal .....	3.00	3.00	Day
Molders, iron, etc.....	3.62½	4.00	Day
Musicians .....	By engagement, small increase		
Painters, house .....	3.50	4.00	Day
Photo-engravers .....	21.50	25.00	Week
Plasterers .....	24.05	30.25	Week



Craft—	Wages		Rate
	1901-2	1911	
Plumbers .....	4.25	5.00	Day
Pressmen, printing .....	23.00	23.25	Week
Press assistants .....	14.85	16.00	Week
Sheet-metal workers .....	3.75	4.50	Day
Stage employes .....	15.00	22.50	Week
Steamfitters .....	4.25	5.00	Day
Stereotypers .....	23.00	25.50	Week
Street railway employes.....	2.25	2.75	Day
Tailors .....	18.00	18.00	Week
Teamsters .....	15.00	18.00	Week
Telegraphers, railroad .....	65.00	70.00	Month
Trainmen, railroad .....	77.50	120.00	Month
Trainmen, switchmen .....	70.00	100.00	Month
Typographical .....	22.50 (Denver)	22.25 (state)	Week
Upholsterers .....	16.50	19.50	Week
Waiters, with meals.....	*13.75	*16.50	Week
Waitress, with meals.....	*9.25	*9.25	Week

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\*Report based on wages paid in mining camps and Denver. A fair average on wages paid in the state would be at least \$2 per week less than figures given. Same average would also apply to cooks.

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### COLORADO'S INDUSTRIAL SURVEY, 1912

The law creating the Bureau of Labor Statistics cites (sec. 12): "All such other information in relation to labor as the commissioner may deem essential to further the objects sought to be attained by this statute." In compliance with this section, it is deemed proper to give a more detailed statement of labor conditions in this state than can be gleaned from the bare statistics presented in other chapters of this report.

The "estimated" statistics presented in our daily newspapers of the progress made in the last two years in the many industries are well known to be printed more in the nature of "boosts" for the state's industries than to present actual facts, and as such are to be commended for what good they may do in assisting the development of the state, and thus making work for the wage-earners and business for the merchants, and assisting to attain an era of prosperity for all.

Colorado has an enormous number of undeveloped resources and for the capitalist presents an inviting field. Capital is what is needed in Colorado to develop these resources; of labor, with

the possible exception of harvest seasons, we have plenty and to spare.

#### SKILLED LABOR

The reports received from the various trades, and from office help requiring clerical ability, show that there has not been more than 75 per cent of this class of labor continuously employed in the last two years; and particularly is this the case in the building industry. The result of this has been that numbers of skilled workers have been glad to accept positions as unskilled laborers, in which, for their labor, they have not received much more than one-half the wages they would receive if steadily employed at their trades. And this condition will continue and is inevitable with the continued use of more and more labor-saving machines, displacing the skilled worker. In fact, it must be recognized that the words "skilled laborer" are fast getting to be a misnomer, as the mechanic in various lines is now kept working on separate and distinct parts of machinery, instead of, as was formerly the rule, working on the whole machine and requiring a thorough knowledge of all parts of the various machines or articles manufactured. Specializing is now the rule in all lines of industry. A mechanic is kept working on work that an apprentice with a few months' experience might do equally as well. This fact is well recognized by the trades-unionists, and from it comes the rule limiting the number of apprentices allowed to the number of mechanics employed. The hue and cry that is made against the trades-unionists "debarring" a boy from learning a trade, and from which much opposition to the trade unions has arisen in certain quarters, is caused by the ignorance of the ordinary person of the economic reason for the limiting of the number of apprentices. And, indeed, this limiting is a real protection to the boy himself; for it would manifestly be an injustice to the youth to permit him to waste his time and talents learning a trade at which he could not obtain employment after he had mastered it.

While not in Colorado, perhaps, to the same extent as in other states, women are also displacing numbers of skilled workers by the advent of the machine. Work that formerly required considerable muscular skill is now done by the machine, with little muscular skill necessary. Women can be employed at a less rate of pay than men, and, naturally, are given the preference. The result of these conditions is that skilled mechanics are fast being relegated in large numbers to the ranks of common laborers, or idleness.

#### COMMON LABOR

The year 1911 was a very poor one for both skilled and common laborers in Colorado. Crops were poor by reason of insufficient moisture, so that there was little demand for farm labor; and, in addition, there was little railroad or irrigation ditch building in progress. There were hundreds of common and skilled



laborers out of employment during this year. The year of 1912 has, however, been very good for common labor, but still poor for the skilled artisan. Good crops, and many enterprises requiring many unskilled laborers, made it possible for nearly every able-bodied man, that wanted to do either farm or common labor work, to obtain employment. Wages advanced from a general average of \$2 per day to \$2.25 or \$2.50 per day, because men were wanted.

#### WOMEN WAGE-EARNERS

The great number of women workers that have invaded the industrial field makes the problem of legislating for the protection and safeguarding of the moral and physical welfare of our womanhood most perplexing, and well worthy of the best efforts of our legislators and public men.

There are five distinct woman trades unions in the state, and the women following these lines are fairly well protected by their respective unions. There are also some unions—as, for example, the typographical unions—that have a small percentage of women members. The women belonging to these unions receive equal pay with the men for equal work performed. Of the women's unions, the garment workers' of Denver is the largest in number. They have the eight-hour workday and earn sufficient salary to make them self-supporting. The same can be said of the bindery women and waitresses; but the laundry women are poorly organized and cannot be said to all earn a wage sufficient to keep them at the American standard of living. Of the tobacco-strippers practically the same may be said. Most of the members of this union, however, live with their respective families.

The stenographers' pay is guided mostly by the skill of the worker. Many receive good salaries, but the average is about \$50 per month. They may be classed among those women who earn sufficient pay to support themselves. The opportunities, however, for obtaining desirable employment at this occupation are becoming scarce, the supply more than keeping pace with the demand; and this fact holds good in nearly every line of desirable work for women. Store clerking, bookkeeping, and all manner of clerical work are overcrowded; there are more applicants than positions. The American girls, as a rule, do not take kindly to what the "old-fashioned" people considered their natural sphere of labor—housework. There are many reasons for and against them in this; but after all has been said the fact remains that it is a deplorable fact, and one that is not conducive to the general welfare of the American home. The girls complain that a large number of their employers are overbearing and not skilled in the treatment of their help; that they are too much debarred from liberty; that their hours of labor are excessive, and they lose social standing. The employers, on the other hand, make the charge that the average American girl is not properly trained in housework and knows little about cooking; in fact, that her home training is

badly neglected. Certainly a serious charge, and one that should command the serious attention of the mothers of girls.

There is always a demand for competent house help; the pay is good, and the girls are removed from temptation. A competent maid can afford to be independent; she can choose her own mistress, can command good pay, have a good home, and, with intelligent people, commands more respect than does the worker in almost any other vocation.

The charge of the young women that many of the mistresses are unreasonable in their demands, and are not fitted by temperament, experience, or ability to be at the head of a household and direct hired help, is, from the experience gained in the wage collection department of the bureau, also found to be true. Numerous complaints are constantly being made to the department of failure to collect wages due when help desire to change their positions. The spirit of petty spite seems to enter into these cases, and, no matter how faithfully a young woman has served her mistress, the desire to hold up the pay of the help, and otherwise annoy her, seems to be a favorite diversion of the mistress at these times. Sometimes even worse cases are reported, when the mistress openly charges dishonesty against the character of a girl, without a semblance of truth, blackening the character of a young woman to gratify malicious instincts.

The cry of women that they aspire to some more "elevating" occupation than that of housework is not to their credit, and the maudlin sentiment of snobbery or laziness that actuates this cry should no more be encouraged than should that of the mechanic, hod-carrier, or laborer who prefers to loaf rather than work, and offers no better excuse than that he does not consider his occupation worthy of his ability. Every woman or man worth while has ambition. The way to gratify it is to give honest and faithful service, and to say, as did the immortal Lincoln: "I will prepare myself, and perhaps some day my opportunity will come." That "opportunity" should be the reward of faithful service, and it will be found more readily in the home life of the people than in slaving in workshops, factories, offices, or large stores, conducted by corporations that are apt to regard their workers no more highly than they do their machinery or stock in trade. There are two sides to every question; each is sometimes right, and both are sometimes wrong. The workers are entitled to decent treatment and a living wage commensurate with the profits of the industry; the master is entitled to faithful service.

The poorest-paid among the women wage-earners are those that work in stores, laundries, and factories that are not protected by the unions. In many of these places is found, by the starvation wages paid, a direct temptation for girls to become immoral. A young woman cannot possibly live on the wages



paid in some of these establishments, and must either live with her family or obtain some other assistance, to make ends meet. The department has conducted an investigation into the wages paid and the manner of existence of the young women working in these places, and here appends the answer received from some workers in these establishments:

Female help in alteration room of department store: Single woman and supports herself. Receives \$7 per week when working full time. Pays \$4 per week for board and room, and 60 cents per week for car fare. Works an average of fifty weeks a year, less holidays that are deducted from her pay. Says that money left after paying expenses goes for clothes, and adds that she "dresses very poorly."

Widow with child: Works in a laundry on shake-table. Earns \$3.50 per week. Lives at home with parents, and turns over her wages every week to them. Works nine hours a day, and loses no time. Parents assist her.

Worker in laundry: Earns \$12 per week, and supports herself. Pays \$5 per week for room and board, and 60 cents per week for car fare. Uses the remainder for living expenses. Has nothing saved for sickness, and belongs to no fraternal organization or union. Works nine hours a day.

Worker in candy factory: Supports herself. Wages, \$4.50 a week. Pays \$1.25 a week for room rent, \$1.50 for board, and 60 cents for car fare. Works full time, 312 days a year, less holidays. (Comment on this case is unnecessary. The facts presented are absolutely true.)

Female worker in biscuit factory: Employed in the packing department. Works piece work. Earns an average of \$8 per week. Pays \$5 for room and board, and 60 cents for car fare. Loses about two days a month. Says that she spends \$130 a year for clothing.

Female worker in biscuit factory: Employed in icing, day work. Wages, \$7.50 per week. Pays \$5 for room and board, 60 cents for car fare, and 40 cents for laundry. Loses two days a month and all holidays.

Clerk in department store: Receives \$8 per week wages. Pays \$4 per week for board and room, and 60 cents for car fare. Works full time, and is paid for all holidays. Supports herself, and belongs to no lodge or fraternal society.

Female employe in creamery: Wrapping butter, piece work. Averages \$6 per week. Pays for board and room \$4 a week, and 60 cents for car fare. Lives with parents. Works forty-eight hours a week in summer, and loses much time in winter.

Widow, employed in millinery store: Wages, \$10 a week. Pays \$3 a week for room, \$4 for board, and 60 cents for car fare. She can work 312 days a year, less holidays, for which she is

not paid, and is allowed to take one or two weeks' vacation without pay. This condition applies to competent workers, which were the only ones employed when the establishment was visited by the deputy from this department. During the busy season cheaper help is used to assist, and \$7 a week is the usual pay for them.

Chocolate dipper in candy factory: Piece worker. Averages \$11 a week pay. Pays from \$4.50 to \$6 for board and room, 60 cents for car fare, and spends \$160 a year for clothing. Works full time, with exception of some seasons of the year when business is slack and a few hours a day are lost. Other employes of factory, such as packers, receive from \$3.50 to \$5 per week.

Stenographer in attorney's office: Receives \$8 a week; started at \$6 a week. Average pay for women doing this work will run from \$10 to \$11.50 a week. Works eight hours a day. Lives with parents.

Attends reception room in photographer's gallery: Receives \$18 a week; retoucher gets \$15 a week. Works from 8:30 to 6 o'clock, with one hour off for lunch. Girls employed in remounting photographs receive from \$3 to \$10 a week.

Sales ladies in dry goods store: Receive from \$4.50 to \$12 per week, with one cent commission on sales of over \$50 a day.

Many of the self-supporting sales ladies and other female help live in apartment houses. Two of them will club together and engage a buffet apartment, the cheapest of which can be rented for \$5 a week. Steam heat is furnished, with hot and cold water. The women can board themselves, and on Sundays do considerable of their laundry, and can by these means live more economically than they could by boarding in restaurants. In addition, they have their own apartment, can do their own cooking, and perhaps enjoy a better, more home-like existence than they could by boarding.

The experience of two of these young women was told to a deputy of this department, and is worth relating here: It appears that the girls were paying \$5 a week for their apartment, and could rent the same for \$20 a month by paying in that way. They saved up, and finally got \$20 together between the two of them, and paid it over to the proprietor; but they found that, after paying this money, they had just 10 cents between the two of them for provisions for three meals, for which they purchased oatmeal, and subsisted on that until they drew their weekly pay.

No woman should be expected to support herself on less than \$10 per week, and even this sum gives her but a scrimped existence. The natural desire for company, amusements, jewelry, and pretty clothes is the temptation that leads many to accept a sweetheart that will furnish these things for favors received; and it is observed that it is not the factory girls—or, in fact, the girls that are employed at hard manual labor—that



are the easiest tempted. The natural instinct of women is to be pure. The way to keep them so is to see that they receive a wage sufficient for them to live upon respectably. The labor unions have done more to promote morality among the women workers than all other influences combined. The employer that pays his women workers starvation wages, and donates large sums to maintain churches and foreign missions, is promoting immorality and insulting the Lord. Such is the forced conclusion of the Labor Department, from exhaustive investigations made by it. That this view is greatly shared by the people of the state was amply demonstrated by the large vote recorded for the passage of the initiated woman's eight-hour law, which carried by far the largest majority given any of the thirty-two measures submitted to the people at the last state election; this law receiving a majority of 76,850, or nearly double the majority given any other measure submitted, and much more than double the majority for or against the larger proportion of the measures submitted.

#### FOREIGN LABOR

Among other things required in the law creating the department is that of a report upon the number, habits and condition of the Chinese in the state. As the passage by Congress of the Chinese exclusion act, some years ago, has practically stopped the arrival of this class of immigrants, no lengthy report is longer needed. The Chinese population has ceased to be a menace; what few are left are engaged in laundry work and in small numbers in the beet fields. The Japanese have supplanted the Chinese, and they are chiefly engaged in doing housework, fruit-picking, as saloon porters, and in the beet fields. The agitation against this class of labor has lessened to a great extent the influx of these aliens, who a few years ago threatened to become a serious menace to the welfare of the native laborers.

The major portion of the foreign labor that is now threatening the extinction of the native laborer comes from southern Europe—Greeks, Slavonians, Bulgarians, Magyars, Montenegrins, Albanians, and even Turks; and, in fact, all the nationalities that inhabit the Balkan peninsula. These foreigners have been coming here in the last few years much faster than the "melting pot" could absorb them. The large corporations of the state are accused of importing them because they can be handled and abused with impunity. However, they, like the Italians, seem to offer a fruitful field for the labor organizer, and while numbers of them have been and are furnishing the strike-breakers for the northern coal operators, it is more than likely that, as soon as they become accustomed to American conditions and acquainted with their rights as citizens, they will prove as stubborn and uncontrollable as the Japs have proved themselves to be in the industrial field; they will no longer be classed among

the desirables by the labor-skinning employers, and the native laborer will again come into his own.

#### THE AMERICAN LABORER

The observations of the Department of Labor of Colorado as to the relative merit of the different nationalities of laborers employed in the state can, without prejudice and with a most profound sense of impartiality, easily give the palm to the native American laborer. Those corporations and employers who, from a sense of inexperience or prejudice, supplant him with the horde of foreigners, because for the time being these men will be more docile to abuses put upon them, do it with a short-sighted policy that is, from the logic of the situation, bound to be reactionary.

The American laborer wants a fair day's pay for a fair day's work; he wants all that is justly coming to him, and he desires to raise his family at the American standard of living. He spends his pay attaining this end—not in living like swine in a hovel, and sending the major portion of his pay to a foreign country, and thus taking it out of the circulating channels of his native country and state. He is taught to regard and obey the law, although events plainly show that he receives little of this part of his education from his employer, as a rule. The time has arrived when the native worker should receive from the hands of our lawmakers a far greater measure of protection than has been the case in the past.

Some laws must be enacted limiting the importing of hordes of foreign laborers. There are plenty of workers, and to spare, to do all the work of the nation and this state; and a larger portion of the profits of industry must go to the worker that creates them.

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#### WHY GETTING TIRED MAKES MANY CRIPPLES

No inhuman and merciless sultan of a barbaric country ever devised a more cruel torture than that of placing his slaves in such a position that on the slightest lack of attention on their part their hands should be lopped off at the wrist. Yet this is exactly the position that is taken in thousands of American factories today.

"The margin of safety in modern industry," says a recent report on industrial accidents, "is small. It is measured too frequently by fractions of an inch. Reduce the alertness and the exactness with which the body responds to the necessities of labor (as when the worker is tired), and by just so much have you increased the liability that the hand will be misplaced—that fraction which means mutilation."

The statistics of industrial accidents tell the story with a clearness which is amazing. In a compilation of the number of



accidents in factories in Illinois for a year, there were 120 accidents between the hours of eight and nine o'clock in the morning, but there were 257, or considerably more than twice as many, between the hours of eleven and twelve o'clock in the morning. Similarly, there were 111 accidents between one and two o'clock in the afternoon, after the noon-hour rest, but there were 260 between the hours of four and five o'clock in the afternoon. In other words, the two periods when the workers were tired gave rise to 517 accidents, as against 231 when work was beginning. This is a fearful penalty to inflict for the crime of being tired.

A tabulation of the exact causes of these accidents was made, and 2,687 of the persons injured gave a fairly accurate description of what had happened preceding the accidents. Of these, 2,203, or over 82 per cent, "conceivably might have been avoided if the injured, or the fellow-servant who was the cause of the accident in some cases, had possessed accurate muscular control." The time at which these accidents occurred also was given, and showed the same preponderance of disasters between the hours of eleven and twelve, and again of four and five in the afternoon. In Germany and France the same rule holds true, save that the morning accidents are shown to be more frequent between ten and eleven o'clock, owing to the earlier hour at which the operatives begin work and the almost universal custom in Europe of keeping the mills running continuously and the workers going to dinner in two shifts. It is not enough to make the margin of safety against accident sufficiently good to be applicable when the machine-user is fresh; the margin must be great enough to insure his safety when he is tired; for the millennium has not yet come when Labor can be divorced from Fatigue.

## CHAPTER IV

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### INDUSTRIAL DISPUTES

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#### THE NORTHERN COAL FIELDS STRIKE

The strike in the northern coal field still continues. During the year the condition of the district has improved, and at the present time the great majority of the union coal-miners who remained in the district have gone to work. This was arranged when the American Fuel Company, which operates several mines in Boulder and Weld Counties, decided to sign an agreement with the United Mine Workers of America, which it did on March 5, 1912. This was followed by a number of the independent mines taking the same course and signing a like agreement. The Rocky Mountain Fuel Company, a Wyoming corporation, which is the successor of the Northern Coal and Coke Company, and operating ten mines in the district, and which has refused to entertain any proposition for the settlement of the strike, during the summer applied and obtained a dissolution of the injunction restraining the miners, granted by Judge Greeley Whitford, of the Denver District Court, and made an application to the federal District Court for an injunction against the miners, alleging that neither Governor Shafroth as representing the state authorities, nor Sheriff Capp as representing the authorities of the County of Boulder, was willing or able to control the situation or give them and their property the necessary protection. The application was made to Judge Robert Lewis, when sitting in the federal court at Denver. This application was supported by a number of affidavits put in by the attorneys for the company, and it was opposed by the union. The application was denied in sweeping terms, and Judge Lewis upheld the right of strikers to picket. Just prior to this application being heard, what might have ended in very serious trouble was started by an unprovoked assault upon an Italian miner who was a member of the union. This assault aroused the foreign miners to such a pitch that they attempted to take summary vengeance upon the offending parties, and attacked a mine in which the man who started the trouble was supposed to be hiding, and, but for the prompt action of Sheriff Capp and the district and local officers of the union, the trouble would have assumed serious proportions. During the evening of the day on which the occurrence took place, while the district was in an excited condition, some three or four hundred shots were fired from the stockades at Hecla Heights, and within

a few days the same tactics were used at several of the non-union mines near Lafayette. Fortunately no one was injured, but several untrue statements were published in Denver papers about a man's head having been blown off with buckshot. On inquiries being made, it was found that the statement was made by a correspondent whose regard for truth was not so great as his desire for notoriety. Warrants were issued for twenty-seven union men, charged with offenses connected with these disturbances, and they, without a single exception, went into Boulder and surrendered themselves to the sheriff. Tony Morello, the man who started the trouble, however, in spite of the fact that Mr. Slater, the man who has charge of the Baldwin-Phelps contingent of gun men employed by the Rocky Mountain Fuel Company, gave Sheriff Capp an order stating that he should be surrendered, never gave himself up, but by some arrangement with the district attorney's office was allowed to remain at large.

These occurrences, together with the fact that all the trouble happened just prior to the application of the Rocky Mountain Company for a federal injunction, caused grave suspicion in the minds of the union men, and the union officials openly express their belief that they were deliberately planned for the purpose of influencing the federal courts in the matter.

Following these disturbances, and Judge Lewis' decision denying the injunction, the condition of the district again became normal. The American Fuel Company, having obtained a number of large contracts, was able to run its mines to their full capacity, and public sympathy began to be shown in favor of the miners, the demand for union-dug coal increasing every day. The effect of this is shown by the following tables, giving the mines employing non-union labor and their output for the month of November, 1911, and the output for November, 1912, where those so marked were employing union miners:



## NON-UNION MINES

Mine	Operators	Output for 1911	Output for 1912
Simpson Mine .....	Rocky Mountain Fuel Co.....	18,943	8,208
Standard Mine .....	Rocky Mountain Fuel Co.....	16,328	10,038
Vulcan Mine .....	Rocky Mountain Fuel Co.....	9,630	5,119
Mitchell Mine.....	Rocky Mountain Fuel Co.....	2,369	5,049
Rex Mine No. 1.....	Rocky Mountain Fuel Co.....	13,556	6,626
Rex Mine No. 2.....	Rocky Mountain Fuel Co.....	1,789	1,339
Hecla Mine .....	Rocky Mountain Fuel Co.....	7,648	3,455
Gorham Mine .....	Rocky Mountain Fuel Co.....	10,442	8,736
Industrial Mine .....	Rocky Mountain Fuel Co.....	11,457	6,613
Monarch Mine No. 1.....	National Fuel Co.....	9,896	4,991
Monarch Mine No. 2.....	National Fuel Co.....	7,686	5,134
Non Pareil Mine.....	Brooks-Harrison.....	3,744	2,705
Puritan Mine .....	National Fuel Co.....	16,996	12,472
Park Dale Mine.....	National Fuel Co.....	10,635	7,356
Golden Ash Mine.....	Baum Co.....	14,952	13,968
Warwick Mine...Controlled by Rocky Mountain Fuel Co..		2,154	89
		158,288	101,908

Showing a decrease in the output for November, 1912, over November, 1911, of 56,380 tons.

## UNION MINES

Mine	Operators	Output for 1911	Output for 1912
Capitol Mine .....	American Fuel Co.....	5,563	13,267
Matchless Mine .....	American Fuel Co.....	2,534	9,109
Fox Mine .....	American Fuel Co.....	3,770	15,743
Centennial Mine .....	American Fuel Co.....	2,837	10,401
Senator Mine .....	American Fuel Co.....	454	4,500
Strathmore Mine .....	American Fuel Co.....	...	3,502
Evans Mine .....	American Fuel Co.....	3,902	5,283
Ideal Mine .....	Independent Fuel Co.....	764	1,044
Shamrock Mine .....	Independent Fuel Co.....	996	1,054
		20,820	63,901

Showing an increase in the output for November, 1912, where union men were employed, over November, 1911, where non-union men were employed, of 42,081 tons.



During the year 1912 nine men lost their lives in Boulder and Weld Counties in mines operating with non-union men, and during the same period in the same district only one man lost his life in mines operating with union men.

The struggle for existence between union and non-union companies became acute, and the Rocky Mountain Fuel Company in December began a coal war in the market by making reductions in prices at Boulder, and threatened to extend the cut to Denver and other markets. The union men, at once realizing that this move was in reality aimed solely at the union, and that the ruining of the American Fuel Company was merely an incident in the campaign of opposition to organized labor, met in convention and thoroughly discussed the new phase. Following this convention, it was taken up by all the local unions, and they decided to stand by the American Fuel Company, and tendered to that company their assurance that they might rely upon their loyal support. The spirit of the miners can best be illustrated by a quotation from a speech made at the Louisville meeting by an Italian miner:

"The United Mine Workers feed our wives and babies. American Fuel Company give us the powder and oil, and we digga the coal for nothing."

The majority of the old-time miners in the northern coal fields own their own homes and have built up their towns, and they recognize fully that to allow any combination to ruin a coal-mining company which was favorable to union labor would be a blow at them individually as to their property rights, and collectively as to their organization, and they intend to meet any and every move that may be made in this direction.

The latest move is one of the most important ever taken in the history of coal-mining disputes, and will doubtless be far-reaching in its effect. Hitherto coal operators have always been able to make the consumer pay for any and all disputes they may have with their employes, by raising the price of coal. This course was adopted by the operators in the northern fields, who raised the price to the consumer from \$1 to \$1.50 per ton. By doing this they were not only able to recoup themselves in a very large measure for the attendant expenses of the strike, but also to create a prejudice in the public mind against all forms of organized labor. Today there is a determination on the part of the union miners to alter this and to remove the fighting ground to the actual markets for coal, and compel the operators, when they precipitate unreasonable fights, to do what the unions have always had to do, no matter how reasonable their cause—viz., to pay the expenses out of their own treasury.

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#### REPORT OF SECRETARY OF STATE JAMES B. PEARCE

On December 7, 1911, after consultation with the Governor, Secretary of State James B. Pearce a second time started for the

northern coal fields, accompanied by two assistants of the department, to examine conditions and report on the situation.

The trip was occasioned, like the first visit made in August, 1910, by a strenuous and determined effort to induce the Governor to order the National Guard into the field, contending that the sheriff was no longer able to maintain order, and that the lives and property of the people in the strike section were unsafe; that lawlessness was general and crimes were being committed, and that the sheriff no longer could control the situation. Two days and nights were spent in the examination. Conditions were found to be better than had existed at the time of the first inspection; in fact, both sides appeared to have exhausted themselves. Too much liquor at times was being consumed by the men behind the stockades, causing some trouble, but nothing out of the ordinary was happening, except small difficulties, mostly of a personal character, the natural outcome of the many months of strife between the contending forces, where one would meet the other and by the use of taunting words start trouble.

There was nothing to indicate a condition which would warrant a resort to the military arm of the state government to keep the peace and protect lives and property; on the contrary, it appeared to be just a policeman's job. Had the business men of Boulder County faced the other way and talked peace, and used their influence with and for the sheriff to preserve order, instead of with and for him to demand the National Guard, there would have been no effort made with the Governor at that time to order the militia into the field.

Within a week after this visit, and the report had been made to the Governor that the National Guard should not be sent to Boulder County, the mine operators themselves admitted that the sheriff could preserve order.

Certain interests have for so many years been accustomed to break strikes with the militia that it is a difficult thing to break them of the habit. It is much the cheapest and speediest method for them, as the taxpayers of the state pay the bills. A striking illustration of this is given in the bond issue of over \$950,000 issued to settle the Cripple Creek war debt.

There are always two sides to these strike situations, and neither party in the controversy is right all the time. The state authorities are representing both sides, as well as all of the rest of the people not engaged in the fight, but who have great interests at stake, depending on a settlement of the trouble. It therefore behooves them to be extremely cautious in considering representations made by either side, well knowing that the contending parties are seldom fair to each other, and that a separate and independent investigation is always the safest.

The militia should never be used until every other remedy is exhausted, and then only to maintain order, and should not take sides or be used to break a strike.



## THREATENED STRIKE OF COAL-MINERS AT ROCKVALE

In the early part of October, 1911, several hundred coal-miners threatened to strike because of dissatisfaction with the method of weighing coal, and although the men were not members of any union of their calling—unorganized men—they listened to the suggestions of union officials and appealed their case to the Governor of the state and the Deputy Labor Commissioner, Edwin V. Brake, with request that the laws of the state be enforced in the matter of coal being weighed and measured before screening.

Deputy Labor Commissioner Edwin V. Brake visited the district of the trouble and counseled with the men, reporting his findings to Governor Shafroth in the matter. Upon this report a commission was appointed by the Governor, consisting of Mr. E. H. Weitzel for the Colorado Fuel & Iron Company, Mr. John Lawson, executive board member of the United Mine Workers of America, acting for the men, and Mr. James Dalrymple, State Coal Mine Inspector, for the state. These gentlemen effected a compromise, which was partially satisfactory to the miners, and the threatened strike was averted. The following is the official report upon this subject:

Denver, Colo., October 28, 1911.

His Excellency John F. Shafroth,  
Governor of Colorado.

Sir: In compliance with a petition addressed to the Governor of Colorado and E. V. Brake, State Labor Commissioner, signed by several hundred employes of the Colorado Fuel & Iron Company, and supplemented by a request from yourself that I would personally make an investigation of the facts contained in the said petition, I wish to state: I made a trip to the property of the Colorado Fuel & Iron Company at Rockvale, Colorado, and made an investigation, the result of which is contained herein.

I find by reference to section 663, page 325, Revised Statutes of Colorado, 1908, that it is prescribed how and in what manner coal should be mined, as quoted herewith:

"Coal weighed and measured before screening—Pay—Sec. 26. All coal mined by the ton or by weight shall be weighed in the car or other apparatus in which it is removed from the mine before it is screened or before it is passed over or dumped upon any screen or any other device which may let or be capable of letting a portion of the coal drop through such screen or device, and it shall be paid for according to the weight so ascertained at such price per ton as may be agreed upon by such owner or operators and the miner or miners who mine the same. All coal

mined and paid for by measure shall be paid for per car according to the number of bushels marked upon the car or other apparatus in which it is removed from the mine and without the coal thereof being screened or without it being passed over or dumped upon a screen or any device which will let any portion of the coal fall through such screen or device." (L. '01, p. 236, 3.)

It was the evident intention of the legislature to make the law plain and specific that all coal should be weighed and paid for on the mine-run basis. I find by my investigation at Bear Creek and Rockvale, where some 650 or 700 men are employed by the company, that it has adopted a new system of weighing coal, in direct violation of the statute as quoted above. The system now in operation at both mines is as follows: When the coal cars are hoisted to the surface, the coal is weighed mine-run, and then dumped upon a shaker screen or screens. The top screen has a mesh of two and one-half inches. This screen is in motion continually, agitated by power, and all the coal that passes over this screen is designated as lump coal. That is weighed, and the miners are receiving \$1.20 per ton. All of the coal that passes through the first screen then passes over a second screen that has inch meshes. There all the slack that can pass through the inch meshes goes into the slack pile, and all that does not pass through goes into egg or nut coal. The miners receive for both the egg or nut coal and the slack, 20 cents per ton. Previous to the new system adopted by the Colorado Fuel & Iron Company, they were paying 85 cents per ton for mine-run of 2,000 pounds; so you will see that the miners are receiving 35 cents per ton increase in their wages on the lump coal, but they are receiving 65 per cent less pay for the egg, nut, and slack. As near as I could determine, the slack at the Rockvale mine would be about 2 per cent. At the Bear Gulch mine, operated by the same company, the coal is much softer, consequently more slack.

The contention of the men is that the law provides for weighing and payment on a mine-run basis, and that they have to submit, under the new arrangement, to the weighing of their coal twice; and they do not believe that they get correct weights at that. They claim that the nut coal commands within 50 cents per ton the same price as the lump in the markets of the state, and that they are receiving only 20 cents per ton for the mining of the same.

The men in this field are unorganized, and only consented to return to work with the understanding that the state authorities would do everything in their power to induce the company to return to the mine-run basis. There is no question in my mind but what the contention of the men, that the company is violating the law, is correct, and I deem it our duty to take the matter up with the proper officers of the Colorado Fuel & Iron Company, and do everything possible to induce them to obey the law; otherwise I am satisfied that the men will not work under the present system of weighing coal.



Dissatisfaction is wide-spread. Some of the men employed at Rockvale have been there twenty years, own their own homes, and are entitled to some consideration at the hands of the company, as well as by the officials of the state.

I would recommend to your Excellency that you take the matter up with the officers of the Colorado Fuel & Iron Company, and try to get them to return to the former basis of weighing the coal, and, upon failure, to induce them to obey the law. I think they should be prosecuted. This company being the largest producer of coal in this state, it seems to them that they are immune from the operations of the law, where they should be the first in the state, having large property interests, to obey the law. It has been the policy of this company to violate all the laws on the statute-books of Colorado that have for their purpose the protection of the wage-earners, and it is time that it was brought to the realization of the fact that Colorado is bigger than any corporation doing business in the state. In times of depression like this, it is poor policy for the company to violate the law and bring about an industrial disturbance which will undoubtedly grow, unless the company obeys the laws as quoted above.

I trust that you will take this matter up immediately, and if there is anything that I can do to assist you in any manner to bring about a settlement of this character, I am at your service.

Yours respectfully,

(Signed) EDWIN V. BRAKE,  
Deputy State Labor Commissioner.

Denver, Colo., November 28, 1911.

Hon. John F. Shafroth,  
Governor of Colorado.

Dear Sir: We, your committee appointed November 13, 1911, to investigate the controversy between the Colorado Fuel & Iron Company and their employes at the Fremont mine, located in Fremont County, Colorado, desire to submit for your consideration the following report:

We visited the mine November 20, 1911, and there met Mr. E. H. Weitzel, general manager of the Colorado Fuel & Iron Company, the third member of your committee. We inspected some of the daily and monthly reports of the output of the mine. We then visited the tippie and inspected the method employed in dumping, screening, and weighing the coal.

The coal is first dumped from the car, while standing upon the cage, into Basket No. 1, and weighed mine-run. The door of the basket is then opened and the coal is run over a screen 17½ feet long by 5 feet wide, set upon an incline of 12½ degrees. This screen is perforated with holes 2½ inches in diameter. The screen is kept in motion by power, has an 8-inch stroke, and has what

is known as a back-action motion. The lump coal going over the screen is caught in Basket No. 2, and is again weighed, and the miner is paid at the rate of \$1.20 per ton for it.

The coal going through the perforations in the screen is again separated into nut, pea, and slack. The miner is paid at the rate of 20 cents per ton for coal of this character.

Formerly, when all coal was weighed in Basket No. 1 and paid for on the mine-run basis, the miner was paid at the rate of 85 cents per ton for all coal mined.

Mr. Weitzel stated that when the system of weighing and paying for coal on the mine-run basis was changed to the screened-coal basis, the perforations in the screen were reduced from 3 inches to  $2\frac{1}{2}$  in diameter.

This change has increased the percentage of lump coal about  $6\frac{1}{2}$  per cent, and decreased the percentage of nut coal about  $6\frac{1}{2}$  per cent, the percentage of slack and pea remaining the same.

Tuesday morning, November 21, 1911, we visited all the working places inside the mine. The mine is operated on the long wall system. We measured the height of the coal in several places, which ranged from 4 feet 3 inches to 5 feet, with a seam of dirt running through the coal near the foot wall, measuring from 1 inch to 6 inches in thickness. In some of the working places the coal was in fair condition, while in others it was very badly crushed. Some of the places were in better shape than others.

Much might be said concerning the ability of the individual miner and the condition of the different places they were working in; also of the system under which the mine is being worked.

Mr. Weitzel informed us that it was not the intention of the company to reduce the wages of the miners when they changed the system of weighing coal from mine-run to the screened-coal basis. He also stated that some of the miners were not trying to increase the percentage of lump coal. If this is the case, in our opinion, it is because the miners do not know how to increase the percentage of lump, and not because they are willfully trying to keep the percentage of lump coal from increasing.

Mr. Weitzel also informed us that any decrease in the earnings of the miners through the change of systems of weighing was made up for the month of October, making their pay equal to what it would have been on a run-of-mine basis. The miners contend, however, that only part of the men received the shortage, or the amount they would have received under the run-of-mine basis.

Looking at this proposition from a fair and impartial standpoint, and as to how it affects both operators and miners, we find the following:

The total production of the Fremont mine for the month of August, 1911, was 12,526 tons, as follows:

Lump coal .....	6,947 tons, equaling.....	55.150¢
Nut coal .....	2,803 tons, equaling.....	22.374¢
Slack and pea coal.....	2,778 tons, equaling.....	21.855¢

September, 1911—total production, 4,342 tons, as follows:

Lump .....	2,372 tons, equaling.....	54.630¢
Nut .....	971 tons, equaling.....	22.360¢
Pea and slack.....	999 tons, equaling.....	23.000¢

October, 1911—total production, 7,339 tons, as follows:

Lump .....	4,580 tons, equaling.....	62.400¢
Nut .....	1,141 tons, equaling.....	15.550¢
Pea and slack.....	1,610 tons, equaling.....	22.000¢

Assuming that the price of coal f. o. b. railroad cars at mine was the same for the three months, and was as follows: lump, \$3.25 per ton; nut, \$2.50 per ton; pea and slack, 75 cents per ton; and that the miners for August and September were paid on a run-of-mine basis of 85 cents per ton, and for October the miners were paid on a lump-coal basis, as follows: lump coal, \$1.20 per ton, and screenings, 20 cents per ton, the miners' earnings for the month of August, amounting to 12,528 tons at 85 cents per ton, equaled \$10,648.80. The miners' earnings for the month of September, 4,342 tons at 85 cents per ton, equaled \$3,690.70.

The company's receipts for August were as follows:

6,947 tons of lump, at \$3.25, equaled.....	\$22,577.75
2,803 tons of nut, at \$2.50, equaled.....	7,007.50
2,778 tons of pea and slack, at \$0.75, equaled.....	2,083.50
	<hr/>
	\$31,668.75

An average price per ton of \$2.53 nearly, for the total production of the mine for August.

The company's receipts for the month of September were as follows:

2,372 tons of lump, at \$3.25, equaled.....	\$7,709.00
971 tons of nut, at \$2.50, equaled.....	2,427.50
999 tons of pea and slack, at \$0.75, equaled.....	749.25
	<hr/>
	\$10,885.75

An average price per ton of \$2.51 nearly, for the total production for the month of September.



The company's receipts for the month of October, 1911, were as follows:

4,580 tons of lump, at \$3.25, equaled.....	\$14,885.00
1,141 tons of nut, at \$2.50, equaled.....	2,852.50
1,610 tons of pea and slack, at \$0.75, equaled.....	1,207.50
	<hr/>
	\$18,945.00

An average price per ton of \$2.58 nearly, for the total production for the month of October.

The earnings of the miners for October were as follows:

4,580 tons of lump, at \$1.20 per ton, equaled.....	\$5,496.00
2,751 tons screenings, at \$0.20 per ton, equaled.....	550.20
	<hr/>
	\$6,046.20

Taking the earnings of the miners for this month and dividing them by the production, we get  $\$6,046.20 \div 7,338 \text{ tons} = 82\frac{1}{2}$  cents per ton paid the miners.

In order to get the average price of all coal produced for August and September, we will add the production of the two months together and divide it by the total receipts for the two months, which gives an average price for these two months of \$2.52 per ton, against \$2.58 per ton for October, and, adding the .021½ cent per ton less paid to the miners in October, makes a difference of .081½ cent per ton; or, in other words, the miners received 85 cents per ton for all coal mined in August and September, the percentage of lump being 55.04, and at the above prices the company received \$2.52 for all coal mined in August and September.

In October the miners received 82½ cents per ton for all coal mined, the percentage being of lump 56 per cent, after allowing 6½ per cent for reduction in perforations in screen, while the company received \$2.58, plus 2½ cents less paid the miners, or \$2.60½ per ton.

So, from these figures it is evident that in October the miners worked at a reduction, while the percentage of lump coal increased 96/100 of one per cent, after allowing 6½ per cent increase for the reduction of the perforations in the screen.

Under the lump-coal basis the miner must produce 65 per cent lump coal in order to make the same wages he made on the run-of-mine basis. This, in our opinion, is too high a percentage of lump, and we believe, unless some radical changes take place, this percentage of lump will not be obtained; so there is very little encouragement for the miner under the present arrangement.



In conclusion, it appears to us that if a change from the run-of-mine basis to a lump-coal basis is to be made, it should be made on such a plan that the wages of the miners will not be reduced.

Respectfully submitted,

JOHN R. LAWSON,  
JAMES DALRYMPLE,  
Committee.

Denver, Colo., December 1, 1911.

His Excellency John F. Shafroth,  
Governor of Colorado.

Dear Sir: I, the undersigned, acted as the Colorado Fuel & Iron Company's representative on a committee appointed by yourself to investigate the difference between the aforesaid company and its employees at the Fremont mine.

In company with the other members of your committee, I visited the mine on November 20, 1911, and there explained thoroughly to the other members of the committee the system of weighing the coal and paying miners both before and after the change in the system of payment which was made October 1, 1911.

The majority report of your committee correctly states the method of hoisting, dumping, and weighing the coal.

Speaking for the Colorado Fuel & Iron Company, I would say that our reason for making a change in the system of payment was that we have felt for several years that our miners at the Fremont mine were indifferent in their practices of mining in regard to the percentage of lump coal produced, though we have tried consistently for the past few years to educate them to better methods; but it seemed that so long as the mine-run basis of payment prevailed and the miner received as much for slack as he did for lump coal, he could not be induced to change his method, which resulted in an actual waste of coal.

The result has been that we have at all times had a considerable quantity of the smaller grades of coal which we found difficult to market and for which we were compelled to accept prices that were unprofitable.

After much study and careful thought, it was decided that our only remedy was to install some system of payment by which the miner would receive a higher price for lump coal than for screenings, but it was not our intention to reduce the earnings of the miner, as we felt that any change of system of payment which resulted in reducing the miner's average earnings would bring dissatisfaction. It is, therefore, our contention that if the miner used ordinary care in the undermining of his coal and assisted us in keeping his working place in the proper shape, his earnings would be increased under our present system in the same proportion as the earnings of the company—by reason of an increase in the percentage of lump coal.

The majority report of your committee passes over this question of the efforts of the miner by the simple statement that "much might be said concerning the ability of the individual miner and the condition of the different places they were working in;" and later on in their report say that "it is because the miners do not know how to increase the percentage of lump, and not because they are willfully trying to keep the percentage of lump coal from increasing."

In this particular I must differ from the majority report and say that we do believe the miners know how to increase the percentage of lump, because we have foremen and others in the mine who are constantly instructing them in better methods, and the small percentage of men who are working under the directions of our foremen in their manner of mining and taking care of their places have increased their percentage of lump and have substantially increased their earnings under the new system.

The majority report takes up the question of the selling price of the coal, and the price paid the miners, in a way that would lead the unthinking to the conclusion that the difference between these two prices was profit to the operator. The prices shown in their schedule are much higher than are received for a considerable part of the product, and I would call your attention to the fact that the price paid the miners is only a part of the cost of producing coal, and covers only the compensation for mining and loading the coal. Each miner is paid for brushing, which means the rock that has to be blasted down and removed in order to make head room in the working place. The coal is hauled first by mule, and then by rope, to the shaft bottom; is then hoisted, screened, picked, and loaded into railroad cars. The costs of supervision and ventilation are both considerable items, and the cost of timbers is a very large item in the total operating cost. In short, I will say that during the months of August, September, and October, mentioned in the majority report, the total cost of mining at Fremont was more than double the price paid the miners.

Our experience of this new system of payment at Rockvale mine, which works on the same seam and adjoins the Fremont mine, shows us that, as greater care is exercised by the miners and as their skill increases, their earnings increase proportionately; the new system, which has been in vogue at Rockvale since last April, showing the percentage of lump obtained as increasing from 66.32 per cent in April to 68.18 per cent in October.

We firmly believe that the Rockvale miners can go into the Fremont mine and produce as large a percentage of lump coal within a short time as they are now producing at Rockvale, and that, if the Fremont miners will show the same spirit in trying the new arrangement, it will not be long until they are as well satisfied as the Rockvale miners.

Respectfully submitted,

(Signed) E. H. WEITZEL.



## CHAPTER V

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### COMPOSITION OF THE POPULATION OF THE STATE

(Compiled from United States Census Report, 1910.)

The population of Colorado is 799,024. Compared with a population of 539,700 in 1900, this represents an increase in the last decade of 259,324, or 48 per cent. During the same period the total population of continental United States increased 21 per cent.

On account of the wide differences in characteristics among the different classes of the population, the statistics on each subject here presented are shown according to race, and for the whites according to nativity and parentage. Classification according to nativity and parentage is scarcely necessary for the other races, since nearly all negroes and Indians are native-born of native parentage, and nearly all Chinese and Japanese either foreign-born or of foreign parentage.

Marked differences often exist between urban and rural communities with respect to the composition and characteristics of the population. The two classes are distinguished in connection with several of the subjects. Urban population includes that of all incorporated places of 2,500 inhabitants or more, the remainder being classified as rural.

#### COLOR AND NATIVITY

Of the total population of Colorado, 475,136, or 59.5 per cent, are native whites of native parentage; 181,428, or 22.7 per cent, are native whites of foreign or mixed parentage; 126,851, or 15.9 per cent, are foreign-born whites; and 11,453, or 1.4 per cent, are negroes.

Of the urban population, 56.9 per cent are native whites of native parentage; of the rural population, 62.1 per cent. The corresponding proportions for native whites of foreign or mixed parentage are 24.7 and 20.7 per cent, respectively. The percentage of foreign-born whites is 15.7 in the urban population and 16 in the rural; the percentage of negroes is 2.3 in the urban and 0.5 in the rural. (See Table I.)

#### SEX

The percentage of males over females is 430,697 males to 368,327 females, or 116.9 males to 100 females. Among native whites the ratio is 109.7; among foreign-born whites, 160.1. In the urban population there are 104.4 males to 100 females, and in the rural, 131.5. (See Table II.)

## STATE OF BIRTH

Of the population born in the United States, 39.9 per cent were born in Colorado, and 65.1 per cent outside of the state, and of the native negroes, 81 per cent. (See Table III.)

## FOREIGN NATIONALITIES

Of the foreign-born white population, persons born in Germany represent 13.5 per cent; Italy, 11.3; Russia, 10.7; Austria, 10.3; England, 10.2; Sweden, 9.8; Canada, 7.5; Ireland, 6.9; Scotland, 3.4; Denmark, 2.2; Mexico, 2; all other countries, 12.4 per cent. Of the total white stock of foreign origin, which included persons born abroad and also natives having one or both parents born abroad, Germany contributed 18.1 per cent; England, 11.9; Ireland, 10.7; Sweden, 8.2; Canada, 7.8; Italy, 7.8; Russia, 7.3; Austria, 6.9; Scotland, 3.8; Denmark, 1.9 per cent.

## ILLITERACY

There are 23,780 illiterates in the state, representing 3.7 per cent of the total population ten years of age and over, as compared with 4.2 per cent in 1900. The percentage of illiteracy is 11.3 among foreign-born whites, 8.6 among negroes, and 1.6 among native whites; these percentages being lower than in 1900 for each class except the foreign-born whites, whose percentage of illiteracy in 1900 was 8.1.

For all classes combined the proportion of illiterates is lower in urban than in rural communities, the percentages being 2.4 and 5.2, respectively.

For persons from ten to twenty years of age, inclusive, whose literacy depends largely upon present school facilities and school attendance, the percentage of illiteracy is 1.6. (See Table V.)

## DWELLINGS AND FAMILIES

The total number of dwellings in the state is 183,874, and the total number of families, 194,467; indicating that in very few cases does more than one family occupy a dwelling. The average number of persons per dwelling is 4.3, and the average number per family, 4.1.

TABLE I—COLOR, NATIVITY, AND PARENTAGE

Class of Population	Number			Per Cent of Total		
	1910	1900	1890	1910	1900	1890
The State						
Total population .....	799,024	539,700	413,249	100.0	100.0	100.0
White .....	783,415	529,046	404,534	98.0	98.0	97.9
Negro .....	11,453	8,570	6,215	1.4	1.6	1.5
Indian .....	1,482	1,437	1,092	0.2	0.3	0.3
Chinese .....	373	599	1,398	*	0.1	0.3
Japanese .....	2,300	48	10	0.3	*	*
All other (Hindu) .....	1	.....	.....	*	.....	.....



Class of Population	Number			Per Cent of Total		
	1910	1900	1890	1910	1900	1890
Total native .....	669,437	448,545	329,259	83.8	83.1	79.7
Total foreign-born .....	129,587	91,155	83,990	16.2	16.9	20.3
Native white, total.....	656,564	438,571	322,028	82.2	81.3	77.9
Native parentage .....	475,136	311,335	242,214	59.5	57.7	58.6
Foreign parentage .....	114,747	79,692	52,370	14.4	14.8	12.7
Mixed parentage .....	66,681	47,544	27,444	8.3	8.8	6.6
Foreign-born white .....	126,851	90,475	82,506	15.9	16.8	20.0
Urban Population						
Total .....	404,840	260,651	185,905	100.0	100.0	100.0
White .....	394,156	253,125	179,686	97.4	97.1	96.7
Negro .....	9,359	7,052	5,009	2.3	2.7	2.7
Indian, Chinese, Japanese, and all other .....	1,325	474	1,210	0.3	0.2	0.7
Native white, total.....	330,458	208,316	141,115	81.6	79.9	75.9
Native parentage .....	230,544	141,433	102,686	56.9	54.3	55.2
Foreign parentage .....	63,222	66,883	38,429	<div> <div>15.6</div> <div>9.1</div> </div>	25.7	20.7
Mixed parentage .....	36,692					
Foreign-born white .....	63,698	44,809	38,571	15.7	17.2	20.7
Rural Population						
Total .....	394,184	279,049	227,344	100.0	100.0	100.0
White .....	389,259	275,921	224,848	98.8	98.9	98.9
Negro .....	2,094	1,518	1,206	0.5	0.5	0.5
Ind., Chi., and Jap.....	2,831	1,610	1,290	0.7	0.6	0.6
Native white, total.....	326,106	230,255	180,913	82.7	82.5	79.6
Native parentage .....	244,592	169,902	139,528	62.1	60.9	61.4
Foreign parentage .....	51,525	60,353	41,385	<div> <div>13.1</div> <div>7.6</div> </div>	21.6	18.2
Mixed parentage .....	29,989					
Foreign-born white .....	63,153	45,666	43,935	16.0	16.4	19.3

\*Less than one-tenth of 1 per cent.

TABLE II—SEX, FOR THE STATE AND PRINCIPAL CITIES

Class of Population	Males			Males		
	to 100			to 100		
	Females			Females		
The State	Male	Female	Females	Male	Female	males
		1910			1900	
Total population .....	430,697	368,327	116.9	295,332	244,368	120.9
White .....	421,471	361,944	116.4	289,490	239,556	120.8
Negro .....	5,867	5,586	105.0	4,473	4,097	109.2
Indian, Chinese, Jap- anese, and all other..	3,359	797	421.5	1,369	715	191.5
Native white, total.....	343,397	313,167	109.7	234,068	204,503	114.5
Native parentage .....	250,989	224,147	112.0	168,158	143,177	117.4
Foreign parentage .....	58,884	55,863	105.4	41,788	37,904	110.2
Mixed parentage .....	33,524	33,157	101.1	24,122	23,422	103.0
Foreign-born white .....	78,074	48,777	160.1	55,422	35,053	158.1
Urban population .....	206,805	198,035	104.4	134,267	126,384	106.2
Rural population .....	223,892	170,292	131.5	161,065	117,984	136.5
Cities of Over 25,000						
Colorado Springs.....	14,042	15,036	93.4	10,388	10,697	97.1
Denver .....	107,395	105,986	101.3	66,592	67,267	99.0
Pueblo .....	24,855	19,540	127.2	15,350	12,807	119.9

TABLE III—STATE OF BIRTH

Place of Birth	Number		Per Cent	
	of Total			
	1910	1900	1910	1900
Total native .....	669,437	448,545	100.0	100.0
Colorado .....	233,516	151,681	34.9	33.8
Other states .....	435,921	296,864	65.1	66.2
Missouri .....	50,729	31,188	7.6	7.0
Illinois .....	49,964	33,824	7.5	7.5
Iowa .....	44,276	24,960	6.6	5.6
Kansas .....	37,356	20,864	5.6	4.7
Ohio .....	30,573	24,824	4.6	5.5
Nebraska .....	24,643	11,681	3.7	2.6
New York .....	23,802	22,320	3.6	5.0
Pennsylvania .....	23,596	19,734	3.5	4.4
Indiana .....	21,219	14,535	3.2	3.2
Wisconsin .....	12,085	8,874	1.8	2.0
New Mexico .....	11,992	10,222	1.8	2.3

Place of Birth	Number		Per Cent of Total	
	1910	1900	1910	1909
Other States—				
Michigan .....	11,049	8,094	1.7	1.8
Kentucky .....	10,103	7,146	1.5	1.6
Texas .....	6,679	3,521	1.0	0.8
Tennessee .....	6,267	4,225	0.9	0.9
Minnesota .....	5,785	2,742	0.9	0.6
All other .....	65,803	48,110	9.8	10.7

TABLE IV—AGE AND NATIVITY FOR CITIES OF 25,000 OR MORE

Age Period	Total		Native White		Foreign- Born White		Negro	
	Male	Female	Male	Female	Male	Female	Male	Female
Colorado Springs.	14,042	15,036	11,988	12,967	1,518	1,463	505	602
Under 5 years...	1,108	1,017	1,069	972	4	3	33	42
Under 1 year....	231	192	227	180	.....	1	4	11
5 to 9 years.....	1,144	1,163	1,083	1,101	14	20	47	42
10 to 14 years....	1,120	1,207	1,044	1,126	24	28	51	53
15 to 19 years....	1,193	1,306	1,134	1,241	23	30	33	35
20 to 24 years....	1,281	1,554	1,123	1,386	112	100	42	67
25 to 34 years....	2,490	2,933	2,080	2,437	306	346	98	149
35 to 44 years....	2,308	2,467	1,815	2,016	388	353	100	97
45 to 64 years....	2,727	2,702	2,122	2,165	515	444	82	92
65 and over.....	609	619	467	465	129	134	11	20
Age unknown ...	62	68	51	58	3	5	8	5
Denver .....	107,395	105,986	83,064	85,066	20,895	18,046	2,652	2,774
Under 5 years...	8,442	8,437	8,186	8,155	99	101	147	166
Under 1 year....	1,788	1,657	1,716	1,618	3	5	37	33
5 to 9 years.....	8,104	8,072	7,622	7,548	337	356	138	161
10 to 14 years....	8,159	8,169	7,553	7,594	435	398	164	169
15 to 19 years....	8,821	9,792	8,030	8,941	608	633	167	210
20 to 24 years....	10,604	11,157	8,661	9,350	1,586	1,479	241	315
25 to 34 years....	21,613	21,475	15,889	16,634	4,772	4,128	647	685
35 to 44 years....	17,446	17,125	11,996	12,324	4,735	4,249	593	541
45 to 64 years....	19,870	17,505	12,467	11,786	6,775	5,275	484	436
65 and over.....	3,698	4,005	2,192	2,538	1,434	1,385	61	81
Age unknown ...	638	249	468	196	114	42	10	10

Age Period	Total		Native White		Foreign-Born White		Negro	
	Male	Female	Male	Female	Male	Female	Male	Female
Pueblo .....	24,855	19,540	18,459	15,898	5,418	2,913	777	721
Under 5 years...	2,260	2,061	2,192	1,987	25	17	42	55
Under 1 year....	476	383	464	377	1	1	11	5
5 to 9 years.....	1,946	1,976	1,826	1,828	69	87	51	60
10 to 14 years....	1,639	1,689	1,489	1,538	103	96	47	55
15 to 19 years....	1,744	1,848	1,419	1,633	277	149	45	66
20 to 24 years....	2,579	2,047	1,710	1,656	759	325	69	66
25 to 34 years....	5,715	3,716	3,850	2,769	1,605	781	168	161
35 to 44 years....	4,314	2,896	2,896	2,110	1,200	655	184	131
45 to 64 years....	3,866	2,666	2,515	1,905	1,175	649	146	112
65 and over.....	612	534	420	383	177	142	15	9
Age unknown ...	180	107	142	89	28	12	10	6

TABLE V—ILLITERATE PERSONS AGED TEN YEARS AND OVER

Class of Population	Both Sexes		Male		Female	
	Per		Per		Per	
	Number	Cent	Number	Cent	Number	Cent
The State						
Total illiterate, 1910.....	23,780	3.7	12,680	3.6	11,100	3.8
Native white .....	8,133	1.6	3,502	1.3	4,631	1.9
Native parentage .....	7,445	2.0	3,142	1.6	4,303	2.5
Foreign or mixed parentage.	688	0.5	360	0.5	328	0.5
Foreign-born white .....	13,897	11.3	8,168	10.7	5,729	12.2
Negro .....	856	8.6	396	7.7	460	9.5
Total illiterate, 1900.....	17,779	4.2	8,774	3.7	9,005	4.8
Native white .....	8,692	2.7	3,898	2.2	4,794	3.2
Native parentage .....	7,920	3.3	3,462	2.6	4,458	4.1
Foreign or mixed parentage.	772	0.9	436	1.0	336	0.8
Foreign-born white .....	7,264	8.1	3,944	7.2	3,320	9.6
Negro .....	962	13.0	458	11.8	504	14.4
Urban Population						
Total illiterate, 1910.....	8,011	2.4	4,039	2.3	3,972	2.4
Native white .....	1,421	0.5	686	0.5	735	0.6
Native parentage .....	1,149	0.6	560	0.6	589	0.6
Foreign or mixed parentage.	272	0.3	126	0.3	146	0.4
Foreign-born white .....	5,838	9.4	2,960	8.5	2,878	10.5
Negro .....	578	7.1	234	5.7	344	8.4



Class of Population	Both Sexes		Male		Female	
	Per		Per		Per	
	Number	Cent	Number	Cent	Number	Cent
The State						
Rural Population						
Total illiterate, 1910.....	15,769	5.2	8,641	4.9	7,128	5.7
Native white .....	6,712	2.8	2,816	2.1	3,896	3.7
Native parentage .....	6,296	3.5	2,582	2.5	3,714	4.7
Foreign or mixed parentage.	416	0.7	234	0.7	182	0.7
Foreign-born white .....	8,059	13.2	5,208	12.6	2,851	14.6
Negro .....	278	15.4	162	15.2	116	15.7

TABLE VI—INDIAN, CHINESE, AND JAPANESE POPULATION FOR  
PRINCIPAL COUNTIES

	Indian	Chinese	Japanese
The state .....	1,482	373	2,300
Adams .....	1	..	20
Bent .....	19	10	27
Boulder .....	4	4	45
Conejos .....	25	2	11
Delta .....	..	1	22
Denver .....	71	227	585
Dolores .....	..	..	13
Eagle .....	..	..	17
El Paso .....	7	24	32
Fremont .....	3	5	23
Garfield .....	..	..	25
Huerfano .....	..	3	58
Jefferson .....	..	2	82
La Plata .....	288	10	61
Larimer .....	..	8	42
Las Animas .....	..	1	205
Logan .....	..	..	79
Mesa .....	218	2	38
Montezuma .....	453	..	1
Montrose .....	..	..	35
Morgan .....	..	..	68
Otero .....	6	3	100
Ouray .....	..	8	4
Park .....	..	..	8
Prowers .....	6	..	40
Pueblo .....	5	41	170

	Indian	Chinese	Japanese
Rio Grande .....	358	1	...
Routt .....	..	..	64
San Juan .....	..	..	6
San Miguel .....	1	4	2
Sedgwick .....	..	..	56
Teller .....	1	..	12
Weld .....	10	7	326
All other counties.....	6	10	23

All other counties have less than five of the stated races.

TABLE VII—MALES OF VOTING AGE BY COUNTIES, 1910

State, 1910 .....	271,648
State, 1900 .....	185,708

County	No.	County	No.
Adams .....	3,224	Garfield .....	3,732
Arapahoe .....	3,747	Gilpin .....	1,503
Archuleta .....	1,029	Grand .....	792
		Gunnison .....	2,474
Baca .....	941		
Bent .....	1,833	Hinsdale .....	279
Boulder .....	9,326	Huerfano .....	4,291
Chaffee .....	2,749	Jackson .....	430
Cheyenne .....	1,338	Jefferson .....	4,728
Clear Creek.....	1,875		
Conejos .....	3,258	Kiowa .....	1,011
Costilla .....	1,537	Kit Carson .....	2,385
Custer .....	680		
		La Plata .....	3,662
Delta .....	4,159	Lake .....	4,072
Denver .....	71,990	Larimer .....	7,555
Dolores .....	271	Las Animas .....	11,434
Douglas .....	1,151	Lincoln .....	2,075
		Logan .....	3,227
Eagle .....	1,247	Mesa .....	7,340
El Paso .....	14,053	Mineral .....	474
Elbert .....	1,646	Montezuma .....	1,568
		Montrose .....	3,493
Fremont .....	6,355	Morgan .....	3,057

County	No.	County	No.
Otero .....	6,189	Saguache .....	1,372
Ouray .....	1,553	San Juan .....	1,725
		San Miguel .....	2,342
Park .....	1,113	Sedgwick .....	1,021
Phillips .....	948	Summit .....	926
Pitkin .....	1,555		
Prowers .....	3,021	Teller .....	5,372
Pueblo .....	19,469		
		Washington .....	1,931
Rio Blanco .....	840	Weld .....	12,637
Rio Grande .....	2,160		
Routt .....	2,939	Yuma .....	2,543

NOTE.—While this table does not give the females of voting age, it is in excess of the number of votes cast for Governor in 1910, which was 225,605 total votes cast for the various candidates.



TABLE VIII—POPULATION, LAND AREA, URBAN AND RURAL TERRITORY BY COUNTIES

Subject	The State	Adams <sup>1</sup>	Arapahoe <sup>1</sup>	Archuleta <sup>1</sup>	Baca <sup>1</sup>	Bent <sup>1</sup>	Boulder	Chaffee <sup>1</sup>	Cheyenne <sup>1</sup>	Clear Creek
POPULATION										
Total population, 1910.....	799,024	28,892	210,263	3,302	2,516	5,043	30,330	7,622	3,687	5,001
1900.....	539,700	(2)	2153,017	2,117	759	3,049	21,544	7,085	501	7,082
1890.....	3413,249	.....	132,135	826	1,479	1,313	14,082	6,612	534	7,184
1880.....	191,327	.....	38,644	.....	.....	1,654	9,723	6,512	.....	7,823
1870.....	39,861	.....	6,829	.....	.....	592	1,939	.....	.....	1,596
Increase, 1900-1910.....	259,324	28,892	2-142,754	1,185	1,757	1,994	8,786	537	3,186	-2,081
Per cent of increase.....	48.0	(2)	2-93.3	56.0	231.5	65.4	40.8	7.6	635.9	-29.4
Increase, 1890-1900.....	126,451	.....	20,882	1,191	-720	1,736	7,462	473	-33	-102
Per cent of increase.....	30.6	.....	15.8	144.2	-48.7	132.2	53.0	7.2	-6.2	-1.4
Land area (square miles).....	103,658	1,262	842	1,220	2,552	1,524	764	1,083	1,777	390
Population per square mile, 1910.....	7.7	7.0	12.2	2.7	1.0	3.3	39.7	7.0	2.1	12.8
Rural population per square mile, 1910.....	3.8	7.0	8.6	2.7	1.0	3.3	21.6	3.0	2.1	12.8
URBAN AND RURAL TERRITORY										
Urban, 1910—Places of 2,500 or more in 1910..	404,840	(2)	22,983	.....	.....	.....	1,795	4,425	.....	.....
Same places in 1900.....	269,662	(2)	(2)	.....	.....	.....	8,351	3,722	.....	.....
Per cent of increase, 1900-1910.....	50.1	(2)	(2)	.....	.....	.....	65.2	18.9	.....	.....
Rural, 1910—Remainder of county in 1910.....	394,184	28,892	27,280	3,302	2,516	5,043	16,535	3,197	3,687	5,001
Same territory in 1900.....	270,038	24,134	26,179	2,117	759	3,049	13,193	3,363	501	7,082
Per cent of increase, 1900-1910.....	46.0	2115.1	217.8	56.0	231.5	65.4	25.3	-1.9	635.9	-29.4

TABLE VIII—POPULATION, LAND AREA, URBAN AND RURAL TERRITORY BY COUNTIES—Continued

Subject	The State	Adams <sup>1</sup>	Arapahoe <sup>1</sup>	Archuleta <sup>1</sup>	Baca <sup>1</sup>	Bent <sup>1</sup>	Boulder	Chaffee <sup>1</sup>	Cheyenne <sup>1</sup>	Clear Creek
POPULATION										
Urban, 1900—Places of 2,500 or more in 1900....	260,651	( <sup>2</sup> )	<sup>2</sup> 133,859	.....	.....	.....	6,150	3,722	.....	2,502
Rural, 1900—Remainder of county in 1900.....	279,049	( <sup>2</sup> )	<sup>2</sup> 19,158	2,117	759	3,049	15,394	3,363	501	4,580
Per cent in places of 2,500 or more, 1910.....	50.7	( <sup>2</sup> )	<sup>2</sup> 29.1	.....	.....	.....	45.5	58.1	.....	.....
Per cent in places of 2,500 or more, 1900.....	48.3	( <sup>2</sup> )	<sup>2</sup> 87.5	.....	.....	.....	28.5	52.5	.....	35.3
DWELLINGS AND FAMILIES										
Dwellings, number.....	183,874	2,091	2,545	815	668	1,064	7,355	1,954	1,235	1,343
Families, number.....	194,467	2,102	2,605	826	678	1,083	7,577	2,021	1,235	1,379
Subject										
POPULATION										
Total population, 1910.....	11,285	5,498	1,947	13,688	<sup>2</sup> 213,381	642	3,192	2,985	43,321	5,331
1900.....	8,794	4,632	2,937	5,487	( <sup>2</sup> )	1,134	3,120	3,008	31,602	3,101
1890.....	7,193	3,491	2,970	2,534	.....	1,498	3,006	3,725	21,239	1,856
1880.....	5,605	2,879	8,080	.....	.....	.....	2,486	.....	7,949	1,708
1870.....	2,504	1,779	.....	.....	.....	.....	1,388	.....	987	.....

<sup>1</sup> For changes in boundaries, etc., see notes at the end of Census Reports.<sup>2</sup> For combined figures for Adams, Arapahoe, Denver, Washington, and Yuma Counties, see Note 1.<sup>3</sup> State total includes population (1,051) of Indian reservations specially enumerated in 1890, not distributed by counties.

Increase, 1900-1910.....	2,491	866	-990	8,201	2213,381	-492	72	-23	11,719	2,230
Per cent of increase.....	28.3	18.7	-33.7	149.5	( <sup>2</sup> )	-43.4	2.3	-0.8	37.1	71.9
Increase, 1890-1900.....	1,601	1,141	-33	2,953	.....	-364	114	-717	10,363	1,245
Per cent of increase.....	22.3	32.7	-1.1	116.5	.....	-24.3	3.8	-19.2	48.8	67.1
Land area (square miles).....	1,393	1,771	747	1,201	58	1,043	845	1,620	2,121	1,857
Population per square mile, 1910.....	8.1	3.1	2.6	11.4	3,679.0	0.6	3.8	1.8	20.4	2.9
Rural population per square mile, 1910.....	5.9	3.1	2.6	11.4	.....	0.6	3.8	1.8	4.7	2.9
URBAN AND RURAL TERRITORY										
Urban, 1910—Places of 2,500 or more in 1910..	3,013	.....	.....	.....	2213,381	.....	.....	.....	33,411	.....
Same places in 1900.....	1,141	.....	.....	.....	2140,472	.....	.....	.....	23,999	.....
Per cent of increase, 1900-1910.....	164.1	.....	.....	.....	251.9	.....	.....	.....	39.2	.....
Rural, 1910—Remainder of county in 1910.....	8,272	5,498	1,947	13,688	( <sup>2</sup> )	642	3,192	2,985	9,910	5,331
Same territory in 1900.....	7,653	4,632	2,937	5,487	( <sup>2</sup> )	1,134	3,120	3,008	7,603	3,101
Per cent of increase, 1900-1910.....	8.1	18.7	-33.7	149.5	( <sup>2</sup> )	-43.4	2.3	-0.8	30.3	71.9
Urban, 1900—Places of 2,500 or more in 1900...	.....	.....	.....	.....	( <sup>2</sup> )	.....	.....	.....	23,999	.....
Rural, 1900—Remainder of county in 1900.....	8,794	4,632	2,937	5,487	( <sup>2</sup> )	1,134	3,120	3,008	7,603	3,101
Per cent in places of 2,500 or more, 1910.....	26.7	.....	.....	.....	2100.0	.....	.....	.....	77.1	.....
Per cent in places of 2,500 or more, 1900.....	.....	.....	.....	.....	( <sup>2</sup> )	.....	.....	.....	75.9	.....
DWELLINGS AND FAMILIES										
Dwellings, number.....	2,250	1,259	519	3,206	44,736	196	759	765	10,645	1,385
Families, number.....	2,398	1,279	521	3,258	51,339	198	764	781	11,118	1,389

TABLE VIII—POPULATION, LAND AREA, URBAN AND RURAL TERRITORY BY COUNTIES—Continued

Subject	Fremont <sup>1</sup>	Garfield <sup>1</sup>	Gilpin	Grand <sup>1</sup>	Gunnison <sup>1</sup>	Hinsdale <sup>1</sup>	Huerfano	Jackson <sup>1</sup>	Jefferson <sup>1</sup>	Kiowa <sup>1</sup>
POPULATION										
Total population, 1910.....	18,181	10,144	4,131	1,862	5,897	646	13,320	21,013	14,231	2,899
1900.....	15,636	5,835	6,690	741	5,331	1,609	8,395	( <sup>2</sup> )	9,306	701
1890.....	9,156	4,478	5,867	604	4,359	862	6,882	.....	8,450	1,243
1880.....	4,735	.....	6,489	417	8,235	1,487	4,124	.....	6,804	.....
1870.....	1,064	.....	5,490	.....	.....	.....	2,250	.....	2,390	.....
Increase, 1900-1910.....	2,545	4,309	-2,559	1,121	566	-963	4,925	21,013	4,925	2,198
Per cent of increase.....	16.3	73.8	-38.3	151.3	10.6	-59.9	58.7	( <sup>2</sup> )	52.9	313.6
Increase, 1890-1900.....	6,480	1,357	823	137	972	747	1,513	.....	856	-542
Per cent of increase.....	70.8	30.3	14.0	22.7	22.3	86.7	22.0	.....	10.1	-43.6
Land area (square miles).....	1,557	3,107	132	1,866	3,179	971	1,500	1,632	838	1,798
Population per square mile, 1910.....	11.7	3.3	31.3	1.0	1.9	0.7	8.9	0.6	17.0	1.6
Rural population per square mile, 1910.....	6.6	3.3	31.3	1.0	1.9	0.7	8.9	0.6	17.0	1.6
URBAN AND RURAL TERRITORY										
Urban, 1910—Places of 2,500 or more in 1910..	7,874	.....	.....	.....	.....	.....	.....	( <sup>2</sup> )	.....	.....
Same places in 1900.....	7,503	.....	.....	.....	.....	.....	.....	( <sup>2</sup> )	.....	.....
Per cent of increase, 1900-1910.....	4.9	.....	.....	.....	.....	.....	.....	( <sup>2</sup> )	.....	.....
Rural, 1910—Remainder of county in 1910.....	10,307	10,144	4,131	1,862	5,897	646	13,320	21,013	14,231	2,899
Same territory in 1900.....	8,133	5,835	6,690	741	5,331	1,609	8,395	2902	9,306	701
Per cent of increase, 1900-1910.....	26.7	73.8	-38.3	151.3	10.6	-59.9	58.7	212.3	52.9	313.6



Urban, 1900—Places of 2,500 or more in 1900...	7,503	.....	3,114	.....	.....	.....	(2)	.....	.....
Rural, 1900—Remainder of county in 1900.....	8,133	5,835	3,576	741	5,331	1,609	8,395	(2)	9,306
Per cent in places of 2,500 or more, 1910.....	43.3	.....	.....	.....	.....	.....	.....	(2)	.....
Per cent in places of 2,500 or more, 1900.....	48.0	.....	46.5	.....	.....	.....	.....	.....	.....

DWELLINGS AND FAMILIES

Dwellings, number.....	4,146	2,415	1,098	496	1,524	197	2,771	283	3,285	933
Families, number.....	4,293	2,475	1,134	502	1,533	197	2,901	286	3,321	942

<sup>2</sup> For combined figures for Jackson and Larimer Counties, see Note 2.

Subject	Kit Carson <sup>1</sup>	La Plata <sup>1</sup>	Lake <sup>1</sup>	Larimer <sup>1</sup>	Las		Lincoln <sup>1</sup>	Logan <sup>1</sup>	Mesa <sup>1</sup>	Mineral <sup>1</sup>	Monte-zuma <sup>1</sup>
					Animas <sup>1</sup>	Animas <sup>1</sup>					
Total population, 1910...	7,483	10,812	10,600	225,270	33,643	5,917	9,549	22,197	1,239	5,029	
1900.....	1,580	7,016	18,054	212,168	21,842	926	3,292	9,267	1,913	3,058	
1890.....	2,472	5,509	14,663	9,712	17,208	689	3,070	4,260	.....	1,529	
1880.....	.....	1,110	23,563	4,892	8,903	.....	.....	.....	.....	.....	
1870.....	.....	.....	522	838	4,276	.....	.....	.....	.....	.....	
Increase, 1900-1910...	5,903	3,796	-7,454	213,102	11,801	4,991	6,257	12,930	-674	1,971	
Per cent of increase.....	373.6	54.1	-41.3	2107.7	54.0	539.0	190.1	139.5	-35.2	64.5	
Increase, 1890-1900.....	-892	31,021	3,391	2,456	4,634	237	222	5,007	1,913	3970	
Per cent of increase.....	-36.1	318.5	23.1	25.3	26.9	34.4	7.2	117.5	.....	363.4	
Land area (square miles).....	2,159	1,851	371	2,629	4,809	2,570	1,822	3,163	866	2,051	
Population per square mile, 1910.....	3.5	5.8	28.6	9.6	7.0	2.3	5.2	7.0	1.4	2.5	
Rural population per square mile, 1910.....	3.5	3.3	8.3	5.1	4.9	2.3	3.6	4.6	1.4	2.5	

TABLE VIII.—POPULATION, LAND AREA, URBAN AND RURAL TERRITORY BY COUNTIES—Continued

Subject	Las										Monte-
	Kit Carson <sup>1</sup>	La Plata <sup>1</sup>	Lake <sup>1</sup>	Larimer <sup>1</sup>	Animas <sup>1</sup>	Lincoln <sup>1</sup>	Logan <sup>1</sup>	Mesa <sup>1</sup>	Mineral <sup>1</sup>	zuma <sup>1</sup>	
POPULATION											
URBAN AND RURAL TERRITORY											
Urban, 1910—Places of 2,500 or more in 1910 ..	.....	4,686	7,508	211,861	10,204	.....	3,044	7,754	.....	.....	
Same places in 1900.....	.....	3,347	12,455	24,588	5,345	.....	998	3,503	.....	.....	
Per cent of increase, 1900-1910.....	.....	40.0	—39.7	2158.5	90.9	.....	205.0	121.4	.....	.....	
Rural, 1910—Remainder of county in 1910.....	7,483	6,126	3,092	213,409	23,439	5,917	6,505	14,443	1,239	5,029	
Same territory in 1900.....	1,580	3,669	5,599	26,678	16,497	926	2,294	5,764	1,913	3,058	
Per cent of increase, 1900-1910.....	373.6	67.0	—44.8	2100.8	42.1	539.0	183.6	150.6	—35.2	64.5	
Urban, 1900—Places of 2,500 or more in 1900 ..	.....	3,317	12,455	23,053	5,345	.....	.....	3,503	.....	.....	
Rural, 1900—Remainder of county in 1900 .....	1,580	3,699	5,599	29,115	16,497	926	3,292	5,764	1,913	3,058	
Per cent in places of 2,500 or more, 1910.....	.....	43.3	70.8	246.9	30.3	.....	31.9	34.9	.....	.....	
Per cent in places of 2,500 or more, 1900.....	.....	47.3	69.0	225.1	24.5	.....	.....	37.8	.....	.....	
DWELLINGS AND FAMILIES											
Dwellings, number.....	2,303	2,448	2,852	5,842	7,285	1,571	2,280	5,232	412	1,222	
Families, number.....	2,315	2,510	2,923	5,938	7,629	1,588	2,419	5,384	412	1,246	
<sup>2</sup> For combined figures for Jackson and Larimer Counties, see Note 2. <sup>3</sup> See Note 3.											
Subject	Rio										Blanco <sup>1</sup>
	Montrose <sup>1</sup>	Morgan <sup>1</sup>	Otero <sup>1</sup>	Ouray <sup>1</sup>	Park <sup>1</sup>	Phillips <sup>1</sup>	Pitkin <sup>1</sup>	Prowers <sup>1</sup>	Pueblo		
POPULATION											
Total population, 1910 .....	10,291	9,577	20,201	1,514	2,492	3,179	4,566	9,520	52,223	2,332	
1900.....	4,535	3,268	11,522	4,731	2,998	1,583	7,020	3,766	34,448	1,690	
1890.....	3,980	1,601	4,192	6,510	3,548	2,642	8,929	1,969	31,491	1,200	

1880.....	2,669	3,970	7,617	.....
1870.....	447	.....	2,265	.....
Increase, 1900-1910.....	5,756	6,309	8,679	—1,217 —506 1,596 —2,454 5,754 17,775 642
Per cent of increase.....	126.9	193.1	75.3	—25.7 —16.9 100.8 —35.0 152.8 38.0
Increase, 1890-1900.....	555	1,667	7,330	—1,779 —550 —1,059 1,909 1,797 2,957 490
Per cent of increase.....	13.9	104.1	174.9	—27.3 —15.5 —40.1 —21.4 91.3 9.4 40.8
Land area (square miles).....	2,264	1,286	2,067	519 2,212 688 1,019 1,630 2,433 3,223
Population per square mile, 1910.....	4.5	7.4	9.8	6.8 1.1 4.6 4.5 5.8 21.5 0.7
Rural population per square mile, 1910.....	3.1	5.3	6.2	6.8 1.1 4.6 4.5 4.0 3.2 0.7
URBAN AND RURAL TERRITORY				
Urban, 1910—Places of 2,500 or more in 1910...	3,254	2,800	7,381	..... 2,977 44,395 .....
Same places in 1900.....	1,217	634	4,531	..... 987 28,457 .....
Per cent of increase, 1900-1910.....	167.4	341.6	63.0	..... 201.6 57.7 .....
Rural, 1910—Remainder of county in 1910.....	7,037	6,777	12,817	3,514 2,492 3,179 4,566 6,543 7,828 2,332
Same territory in 1900.....	3,318	2,634	6,991	4,731 2,998 1,583 7,020 2,779 6,291 1,690
Per cent of increase, 1900-1910.....	112.1	157.3	83.3	—25.7 —16.9 100.8 —35.0 135.4 24.4 38.0
Urban, 1900—Places of 2,500 or more in 1900...	.....	.....	2,513	..... 3,303 28,157 .....
Rural, 1900—Remainder of county in 1900.....	1,535	3,268	9,009	4,731 2,998 1,583 3,717 3,766 6,291 1,690
Per cent in places of 2,500 or more, 1910.....	31.6	29.2	36.6	..... 31.3 85.0 .....
Per cent in places of 2,500 or more, 1900.....	.....	.....	21.8	..... 17.1 81.7 .....
DWELLINGS AND FAMILIES				
Dwellings, number.....	2,440	2,248	4,463	870 634 757 1,170 2,228 10,414 599
Families, number.....	2,471	2,316	4,586	900 658 778 1,172 2,281 11,009 610

TABLE VIII—POPULATION, LAND AREA, URBAN AND RURAL TERRITORY BY COUNTIES—Continued

Subject	Rio Grande <sup>1</sup>	Sa- Rout <sup>1</sup>	San Juan <sup>1</sup>	San Miguel <sup>1</sup>	Sedg- wick <sup>1</sup>	Summit <sup>1</sup>	Teller <sup>1</sup>	Wash- ington <sup>1</sup>	Weld <sup>1</sup>	Yuma <sup>1</sup>
POPULATION										
Total population, 1910.....	6,563	7,561	3,063	4,700	3,061	2,003	14,351	26,002	39,177	28,499
1900.....	4,080	3,661	2,342	5,379	971	2,744	29,002	21,241	16,808	21,729
1890.....	3,451	2,369	1,572	2,909	1,293	1,906	.....	2,301	11,736	2,596
1880.....	1,944	140	1,087	.....	.....	5,459	.....	.....	5,646	.....
1870.....	.....	.....	304	.....	.....	258	.....	.....	1,636	.....
Increase, 1900-1910.....	2,483	3,900	721	—679	2,090	—741	—14,651	24,761	22,369	26,770
Per cent of increase.....	60.9	106.5	30.8	—12.6	215.2	—27.0	—50.5	2383.6	133.1	2391.6
Increase, 1890-1900.....	629	1,292	770	2,470	—322	838	29,002	—1,060	5,072	—867
Per cent of increase.....	18.2	54.5	49.0	84.9	—24.9	44.0	.....	—46.1	43.2	—33.4
Land area (square miles).....	898	6,967	453	1,288	531	649	547	2,521	4,022	2,367
Population per square mile, 1910.....	7.3	1.1	6.8	3.6	5.8	3.1	26.2	2.4	9.7	3.6
Rural population per square mile, 1910.....	4.5	1.1	6.8	3.6	5.8	3.1	9.1	2.4	7.7	3.6
URBAN AND RURAL TERRITORY										
Urban, 1910—Places of 2,500 or more in 1910..	2,544	.....	.....	.....	.....	.....	9,368	(2)	8,179	(2)
Same places in 1900.....	556	.....	.....	.....	.....	.....	15,133	(2)	3,023	(2)
Per cent of increase, 1900-1910.....	357.6	.....	.....	.....	.....	.....	—38.1	(2)	170.6	(2)



<b>Rural, 1910</b> —Remainder of county in 1910.....	4,019	7,561	4,160	3,063	4,700	3,061	2,003	4,983	26,002	30,998	28,499
Same territory in 1900.....	3,524	3,661	3,853	2,342	5,379	971	2,744	13,869	21,576	13,785	23,626
Per cent of increase, 1900-1910.....	14.0	106.5	8.0	30.8	-12.6	215.2	-27.0	-64.1	2280.8	124.9	2134.4
Urban, 1900—Places of 2,500 or more in 1900....	.....	.....	.....	.....	.....	.....	.....	15,133	( <sup>2</sup> )	3,023	( <sup>2</sup> )
Rural, 1900—Remainder of county in 1900.....	1,080	3,661	3,853	2,342	5,379	971	2,744	13,869	21,241	13,785	21,729
Per cent in places of 2,500 or more, 1910.....	38.8	.....	.....	.....	.....	.....	.....	65.3	( <sup>2</sup> )	20.9	( <sup>2</sup> )
Per cent in places of 2,500 or more, 1900.....	.....	.....	.....	.....	.....	.....	.....	52.2	( <sup>2</sup> )	18.0	( <sup>2</sup> )

## Dwellings and Families

Dwellings, number.....	1,410	1,978	1,079	675	1,064	750	607	4,099	1,711	9,032	2,261
Families, number.....	1,472	2,014	1,103	676	1,065	758	607	4,206	1,729	9,284	2,273

<sup>2</sup> See Note 1.

## NOTES REGARDING CHANGES OF BOUNDARIES, ETC.

## COUNTIES

Adams.—Organized from part of Arapahoe in 1902 and part of Denver annexed in 1909; parts annexed to Washington and Yuma in 1903. (See also Note 1.)

Arapahoe.—Parts taken to form Adams and Denver in 1902 and parts annexed to Washington and Yuma in 1903. (See also Note 1.)

Archuleta.—Organized from part of Conejos in 1885.

Baca.—Organized from part of Las Animas in 1889.

Bent.—Organized from part of Greenwood in 1874; parts taken to form Kiowa, Otero, Prowers, and parts of Cheyenne and Lincoln in 1889.

Chaffee.—Organized from part of Lake in 1879; part annexed to Fremont between 1890 and 1900.

Cheyenne.—Organized from parts of Bent and Elbert in 1889.

Conejos.—Parts taken to form parts of Hinsdale, La Plata, and Rio Grande in 1874 and Archuleta in 1885.

Costilla.—Parts taken to form parts of Hinsdale, La Plata, and Rio Grande in 1874.

Custer.—Organized from part of Fremont in 1877.

Delta.—Organized from part of Gunnison in 1883.

Denver.—Organized from part of Arapahoe in 1902; part annexed to Adams in 1909. (See also Note 1.)

Dolores.—Organized from part of Ouray in 1881.

Douglas.—Part taken to form part of Elbert in 1874.

Eagle.—Organized from part of Summit in 1883.

El Paso.—Part taken to form part of Teller in 1899.

Elbert.—Organized from parts of Douglas and Greenwood in 1874; parts taken to form Kit Carson and parts of Cheyenne and Lincoln in 1889.

Fremont.—Parts taken to form Custer in 1877 and part of Teller in 1899; part of Chaffee annexed between 1890 and 1900.

Garfield.—Organized from part of Summit in 1883; part taken to form Rio Blanco in 1889.

Grand.—Organized from part of Summit in 1874; part taken to form Routt in 1877.

Gunnison.—Organized from part of Lake in 1877; parts taken to form Pitkin in 1881 and Delta, Mesa, and Montrose in 1883.

Hinsdale.—Organized from parts of Conejos, Costilla, and Lake in 1874; part taken to form part of Mineral in 1893.

Jackson.—Organized from part of Larimer in 1909. (See also Note 2.)

Jefferson.—Part annexed to Park in 1908.

Kiowa.—Organized from part of Bent in 1889.

Kit Carson.—Organized from part of Elbert in 1889.

La Plata.—Organized from parts of Conejos, Costilla, and Lake in 1874; parts taken to form San Juan in 1876 and Montezuma in 1889.

Lake.—Parts taken to form Gunnison in 1877, Chaffee in 1879, and parts of Hinsdale, La Plata, and Rio Grande in 1874.

Larimer.—Part taken to form Jackson in 1909. (See also Note 2.)

Las Animas.—Part taken to form Baca in 1889.

Lincoln.—Organized from parts of Bent and Elbert in 1889.

Logan.—Organized from part of Weld in 1887; parts taken to form Phillips and Sedgwick in 1889.

Mesa.—Organized from part of Gunnison in 1883.

Mineral.—Organized from parts of Hinsdale, Rio Grande, and Saguache in 1893.

Montezuma.—Organized from part of La Plata in 1889.

Montrose.—Organized from part of Gunnison in 1883.

Morgan.—Organized from part of Weld in 1889.

Otero.—Organized from part of Bent in 1889.

Ouray.—Organized from part of San Juan in 1877; parts taken to form Dolores in 1881 and San Miguel in 1883.

Park.—Part of Jefferson annexed in 1908.

Phillips.—Organized from part of Logan in 1889.

Pitkin.—Organized from part of Gunnison in 1881.

Prowers.—Organized from part of Bent in 1889.

Rio Blanco.—Organized from part of Garfield in 1889.

Rio Grande.—Organized from parts of Conejos, Costilla, and Lake in 1874; part taken to form part of Mineral in 1893.

Routt.—Organized from part of Grand in 1877.

Saguache.—Part taken to form part of Mineral in 1893.

San Juan.—Organized from part of La Plata in 1876; part taken to form Ouray in 1877.

San Miguel.—Organized from part of Ouray in 1883.

Sedgwick.—Organized from part of Logan in 1889.

Summit.—Parts taken to form Grand in 1874 and Eagle and Garfield in 1883.

Teller.—Organized from parts of El Paso and Fremont in 1899.

Washington.—Organized from part of Weld in 1887; part taken to form Yuma in 1889; parts of Adams and Arapahoe annexed in 1903. (See also Note 1.)

Weld.—Parts taken to form Logan and Washington in 1887 and Morgan in 1889.

Yuma.—Organized from part of Washington in 1889; parts of Adams and Arapahoe annexed in 1903. (See also Note 1.)

Note 1.—Adams, Arapahoe, Denver, Washington, and Yuma Counties combined.—Total population: 1910, 247,037; 1900, 155,987; increase, 1900-1910, 91,050; per cent of increase, 58.4. Urban population—1910, 216,364; same places in 1900, 140,472; per cent of increase, 54. Rural population—1910, 30,673; same territory in 1900, 15,515; per cent of increase, 97.7. Urban population—1900, 133,859; rural population—1900, 22,128. Per cent in places of 2,500 or more in 1910, 87.6. Per cent in places of 2,500 or more in 1900, 85.8.

Note 2.—Jackson and Larimer Counties combined.—Total population: 1910, 26,283; 1900, 12,168; increase, 1900-1910, 14,115; per cent of increase, 116. Urban population—1910, 11,861; same places in 1900, 4,588; per cent of increase, 158.5. Rural population—1910, 14,422; same territory in 1900, 7,580; per cent of increase, 90.2. Urban population—1900, 3,053; rural population—1900, 9,115. Per cent in places of 2,500 or more in 1910, 45.1. Per cent in places of 2,500 or more in 1900, 25.1.

Note 3.—In computing this increase the population of Indian reservations in 1900 has been deducted from the total population of the county in order to make that total comparable with the total for 1890 which does not include the population of Indian reservations. The population thus deducted in the several counties was as follows: Archuleta, 100; La Plata, 486; Montezuma, 559.

## CITIES

Boulder.—Part of precinct 31 annexed in 1905 and parts of precincts 4, 22, 29, 30, and 31 annexed in 1908.

Colorado Springs.—Parts of precinct 22 annexed in 1901 and 1910, parts of precinct 50 annexed in 1902 and 1903, part of precinct 5 annexed in 1905, and parts of precinct 21 annexed in 1906 and 1910.

Denver.—Middle, North, and South Globeville precincts and part of Retreat Park precinct (comprising Globeville town), West Elyria precinct and part of East Elyria precinct (comprising Elyria town), part of Argo precinct (comprising Argo town), part of Berkeley precinct (comprising Berkeley town), part of Montclair precinct (comprising Montclair town), part of Valverde precinct (comprising Valverde town), and Paper Mills precinct, all in Arapahoe County, annexed in 1902. Highlands city annexed between 1890 and 1900.

Englewood.—Incorporated in 1909.

Pueblo.—Part of old precinct 5 annexed in 1904. Bessemer city annexed between 1890 and 1900.



## CHAPTER VI

### AGRICULTURAL STATISTICS

#### NUMBER, AREA, AND VALUE OF FARMS

	1910 (April 15)	1900 (June 1)	Increase	
			Amount	Per Cent.
Population .....	799,024	539,700	259,324	48.0
Number of all farms.....	46,170	24,700	21,470	86.9
Approximate land area of the state	66,341,120	66,341,120	.....	....
Land in farms—acres.....	13,532,113	9,474,588	4,057,525	42.8
Improved land in farms—acres....	4,302,101	2,273,968	2,028,133	89.2
Average acres per farm.....	293.1	383.6	—90.5	—23.6
Value of farm property—				
Total .....	\$491,471,806	\$161,045,101	\$330,426,705	205.2
Land .....	362,822,205	90,341,523	272,480,682	301.6
Buildings .....	45,696,656	16,002,512	29,694,144	185.6
Implements and machinery.....	12,791,601	4,746,755	8,044,846	169.5
Domestic animals, poultry and bees .....	70,161,344	49,954,311	20,207,033	40.5
Average value of all property per farm .....	10,645	6,520	4,125	63.3
Average value of land per acre....	26.81	9.54	17.27	181.0

#### POPULATION, NUMBER OF FARMS, AND FARM ACREAGE, 1870 TO 1910

In 1910 the population of the state was more than twenty times as great as in 1870. The largest increases were during the last decade and that between 1880 and 1890.

There are 46,170 farms in Colorado, or twenty-six and one-half times as many as in 1870. During the period from 1870 to 1910 the number of farms increased on the average over 1,100 per year. This increase was most rapid during the last decade, when it averaged 2,147 per year. The increase was general throughout the state.

The table following presents, for the state as a whole for each census from 1870 to 1910, inclusive, a statement of the total population, the number of farms, and the acreage of farm land and of improved land in farms. It also gives the percentage of



the land area in farms, the percentage of farm land improved, and the percentage of increase during each decade in the number of farms and in the land in farms.

Census Year	Population	FARMS		LANDS IN FARMS			Per Cent of	
		Number	Per Cent of Increase	All Land		Im- proved Land (Acres)	Per Cent of Land Area in Farms	Per Cent of Farm Land Im- proved
				Acres	Per Cent Increase			
1910	799,024	46,170	86.9	13,532,113	42.8	4,302,101	20.4	31.8
1900	539,700	24,700	50.7	9,474,588	106.0	2,273,968	14.3	24.0
1890	413,249	16,389	263.7	4,598,941	294.6	1,823,520	6.9	39.7
1880	194,327	4,506	159.3	1,165,373	263.8	616,169	1.8	52.9
1870	39,864	1,738	....	320,346	....	95,594	0.5	29.8

No data prior to 1870. Organized as a territory in 1861.

The land area of Colorado is approximately 66,341,120 acres. Of this area, 13,532,113 acres, or 20.4 per cent, are included in farms. Of the farm acreage, 4,302,101 acres, or 31.8 per cent, are reported as improved land, representing 6.5 per cent of the total land area of the state. The total acreage of farm land increased 42.8 per cent during the last decade. The reported acreage of improved land shows a much greater relative increase from 1900 to 1910 than does the total acreage in farms, making the percentage of farm land which is improved considerably higher in 1910 than 1900.

The table given above shows also the very rapid and continuous increases from the earliest report, in 1870, in both total farm acreage and acreage of improved land. The proportion of the total land area of the state which was occupied by farms rose during this period from one-half of 1 per cent to 20.4 per cent. The proportion of farm land reported as improved has fluctuated greatly, doubtless due largely to the inclusion of large areas of range land and the variations in interpretation of the terms "improved land" and "unimproved land."

#### VALUES OF FARM PROPERTY, 1870 TO 1910

The agricultural changes in Colorado since 1870, as reflected in the values of the several classes of farm property, are shown in the table which follows:

FARM PROPERTY

Census Year	Total		Land and Buildings		Implements and Machinery		Domestic Animals, Poultry and Bees	
	Value	Per Cent of Increase	Value	Per Cent of Increase	Value	Per Cent of Increase	Value	Per Cent of Increase
1910.....	\$491,471,806	205.2	\$408,518,861	284.2	\$12,791,601	169.5	\$70,161,344	40.5
1900.....	161,045,101	37.1	103,344,035	55.1	4,746,755	73.9	49,954,311	68.3
1890.....	*117,439,558	179.7	85,035,180	238.7	2,728,856	199.8	*29,675,528	85.8
1880.....	*41,991,650	703.9	25,101,223	827.0	910,085	317.3	*15,972,342	595.4
1870†.....	5,223,563	.....	2,708,598	.....	218,083	.....	2,596,882	.....

\*Includes estimated value of range animals.

†Computed gold values, being 80 per cent of the currency values reported. No data prior to 1870. Organized as a territory in 1861.

The total wealth in the form of farm property is \$491,472,000, of which 83.1 per cent is represented by land and buildings, 2.6 per cent by implements and machinery, and 14.3 per cent by live stock. The total value of farm property increased from 1900 to 1910 by \$330,427,000; or, in other words, it more than trebled. The absolute gain during the decade from 1900 to 1910 was over seven times, and the percentage gain nearly six times, as great as during the decade immediately preceding. Moreover, the absolute gain in the last decade was over twice as great as that of the preceding thirty years. The percentage increase from 1880 to 1890 was much less than from 1870 to 1880, and from 1890 to 1900 it again fell off greatly.

#### AVERAGE ACREAGE AND VALUES PER FARM, 1870 TO 1910

The changes which have taken place during the past forty years in the average acreage of Colorado farms and in the average values of the various classes of farm property, as well as in the average value per acre of land and buildings, are shown in the following table:

Census Year	Average Acres Per Farm	AVERAGE VALUE PER FARM*				Average Value of Land and Building Per Acre
		All Farm Property	Land and Building	Imple- ments and Machinery	Domestic Animals, Poultry and Bees	
1910	293.1	\$10,645	\$8,848	\$277	\$1,520	\$30.19
1900	283.6	6,520	4,305	192	2,022	11.22
1890	280.6	†7,166	5,189	167	†1,811	18.49
1880	258.6	†9,319	5,572	202	†3,545	21.55
1870‡	184.3	3,006	1,558	125	1,322	8.46

\*Averages are based on "all farms" in state.

†Includes estimated value of range animals.

‡Computed gold values, being 80 per cent of the currency values reported. No data prior to 1870. Organized as a territory in 1861.

One of the striking characteristics of the agricultural conditions in Colorado is the presence of great areas of semi-arid land which has thus far been utilized, if at all, for grazing purposes. Upon this land are many very large farms—or ranches, as they are called—frequently exceeding 100,000 acres in extent, and counting these as farms has increased materially the average number of acres per farm for the state. In fact, one ranch of 451,000 acres, reported in Costilla County in 1900, but not re-



ported in 1910, added over eighteen acres to the average size in 1900 of all farms for the state. Farms of 1,000 acres and over increased in number during the past decade from 1,237 to 1,577, yet the acreage of such farms decreased from 5,025,660 acres in 1900 to 4,880,823 acres in 1910. The farms other than those used almost exclusively for grazing purposes are not, on an average, usually large, and the relative increase in the number of these farms has decreased the average size of all farms of the state since 1900 by 90.5 acres. Since 1870 the average size of the Colorado farm has varied greatly, increasing steadily from 184.3 acres in 1870 to 383.6 acres in 1900, and then decreasing in 1910 to 293.1 acres; the result is a net increase of 108.8 acres since 1870. In 1900 the average size of a Colorado farm was over twice as great as in 1870, the increase averaging almost seven acres a year for the thirty years. In 1910, however, it was only about one and one-half times as large as in 1870.

The average value of a Colorado farm, including equipment, has advanced during the last decade from \$6,520 to more than \$10,600, of which over \$8,800 represents the value of land and buildings, over \$1,500 the value of live stock, and nearly \$300 the value of implements and machinery. The average value of land and buildings is now \$30.19, or somewhat less than three times as much as ten years ago.

Although the average value per farm of live stock was over ten times as great as that of implements and machinery in 1870, it is now less than six times as great. During the forty years implements and machinery have more than doubled in value, while live stock has increased only 15 per cent.

#### FARM TENURE, 1880 TO 1910

The following table shows the distinction of the farms of the state according to character to tenure at each census since 1880:

Number of all farms.....	46,170	24,700	16,389	4,506
Farms operated by owners.....	37,780	19,119	14,546	3,922
Farms consisting of owned land only....	32,474	15,871	*	*
Farms consisting of owned and hired....	4,519	2,368	*	*
Farms operated by managers.....	787	880	*	*
Farms operated by tenants.....	8,390	5,581	1,843	584
Share tenants .....	4,913	.....	.....	.....
Share cash tenants†.....	233	3,351	1,258	419
Cash tenants .....	2,211	.....	.....	.....
Tenure not specified‡.....	1,033	2,230	585	165



## Per cent of farms operated by owners

and managers .....	81.8	77.4	88.8	87.0
Tenants .....	18.2	22.6	11.2	13.0
Share and share-cash.....	11.1	13.6	7.7	9.3
Cash and non-specified.....	7.0	9.0	3.6	3.7

\*Not reported separately.

†Share-cash tenants were doubtless largely included with share tenants in 1900, 1890 and 1880.

‡Prior to 1910 non-specified tenants were included with cash tenants.

It is significant that, while there was an increase of 21,470 in the total number of farms during the last decade, an increase of 18,661 was reported in the number of farms operated by owners and managers, and of only 2,809 in the number operated by tenants. As is usual in newly settled sections of a country, the proportion of farms in Colorado operated by tenants has thus far been small. The great majority of the farms of the state have been acquired by their owners or operators from the government, or private corporations, in the form of homesteads, Carey Act entries, desert-land entries, or irrigated farms. Most of these have been acquired at a small price, or on long time and other favorable terms, making ownership possible to the man of small means. This fact doubtless accounts in the main for the smaller proportion of farms operated by tenants than is found in most of the older states.

In 1880 about thirteen out of every one hundred farms were operated by tenants; in 1890, about eleven; in 1900, about twenty-three; and in 1910, about eighteen. The present proportion is less than half as high as that for the United States as a whole.

Throughout the thirty years the number of both cash and share tenants has been increasing rapidly, and the farms now reported as rented for cash, including "non-specified," represent 7 per cent of the total, and those reported as rented for a share of the products, including "share-cash," 11.1 per cent. In 1880 there were somewhat over two and a half times as many share and share-cash tenants as there were cash and non-specified tenants; in 1910, however, there were only slightly over one and one-half times as many.

The following table shows the total and improved acreage, and the value of land and buildings, for farms operated by owners (including part owners), managers, and tenants, respectively:

Farms Operated By—	All Land in Farms (Acres)		Improved Land in Farms (Acres)		Value of Land and Buildings	
	1910	1900	1910	1900	1910	1900
Total .....	13,532,113	9,474,588	4,302,101	2,273,968	\$408,518,861	\$106,344,035
Owners .....	10,134,797	6,156,841	2,907,897	1,486,705	270,209,463	68,113,548
Managers ....	1,140,446	1,787,515	310,402	207,275	29,343,653	13,167,920
Tenants .....	2,256,870	1,530,232	1,083,802	579,988	108,965,745	25,062,567

The following table shows the percent distribution by tenure groups of the items in the preceding table, and also the number of farms:

Farms Operated By—	Number of Farms		All Land in Farms		Improved Land in Farms		Value of Land and Buildings	
	1910	1900	1910	1900	1910	1900	1910	1900
Total .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Owners .....	80.1	73.8	74.9	65.0	67.6	65.4	66.1	64.1
Managers ..	1.7	3.6	8.4	18.9	7.2	9.1	7.2	12.4
Tenants ....	18.2	22.6	16.7	16.2	25.2	25.5	26.7	23.6

It will be seen that, in 1910, 74.9 per cent of all land in farms was in farms operated by their owners (including part owners), 8.4 per cent in farms operated by managers, and 16.7 per cent in farms operated by tenants; the percentage for owners and for tenants being higher than, that for managers lower than, in 1900.

As shown by the next table, the average size of farms operated by managers in 1910 (1,449.1) was more than five times as great as that of farms operated by owners (274 acres), which was in turn somewhat larger than that of farms operated by tenants (269 acres). The average of each class of farms decreased between 1900 and 1910. In 1910 the percentage of farm land improved was highest for farms operated by tenants, and lowest for those operated by managers.

Farms Operated By—	Average Acres per Farm				Per Cent of Farm		Average Value of Land and Buildings			
	All Land		Improved Land		Improved Land		Per Farm		Per Acre	
	1910	1900	1910	1900	1910	1900	1910	1900	1910	1900
Total .....	293.1	383.6	93.2	92.1	31.8	24.0	\$8,848	\$4,305	\$30.19	\$11
Owners .....	274.0	337.6	78.6	81.5	28.7	24.1	7,304	3,735	26.66	11
Managers .....	1,449.1	2,031.3	394.4	235.5	27.2	11.6	37,285	14,934	25.73	7
Tenants .....	269.0	271.2	129.2	103.9	48.0	37.9	12,988	4,491	48.28	16

## FARM MORTGAGES, 1890 TO 1910

The Eleventh Census (1890) was the first to collect data relating to mortgage debt on farms. The basis of the returns was the "farm home" occupied by its owner. The same class of information was secured by the population schedules of the Twelfth Census (1900). The agricultural schedules of the Thirteenth Census (1910) secured practically the same information, except that the basis was "owned farms" instead of "owned farm homes"—a difference involving, however, no appreciable incomparability.

The following table relates to farms operated by persons owning all or part of the land, and shows for 1910: (1) the number of such farms reported as free from mortgage; (2) the number reported as mortgaged; and (3) the number for which no mortgage reports were secured. Comparable items are included for 1900 and 1890:

Class	Owned Farms*		Owned Farm Homes		Owned Farm Homes†	
	1910		1900		1890	
	Number	Per Cent‡	Number	Per Cent	Number	Per Cent
Total .....	36,993	....	17,850	....	15,417	....
Free from mortgage..	26,822	73.6	12,447	73.0	11,488	74.5
Mortgaged .....	9,636	26.4	4,610	27.0	3,929	25.5
Unknown .....	535	....	793	....	.....	....

\* Includes all farms owned in whole or in part by the operator.

† The 524 "owned farm homes" for which no reports were secured were distributed between "free from mortgage" and "mortgaged" in 1890.

‡ Per cent of combined total of "free from mortgage" and "mortgaged."

In 1910 the total number of farms owned in whole or in part by the operators was 36,993. Of this number, 26,822 were reported as free from mortgage, 9,636 were reported as mortgaged, and for 535 no report relative to mortgage indebtedness was obtained. The number of mortgaged farms constituted 26.4 per cent of the total number of owned farms, exclusive of those for which no mortgage report was obtained. The percentage is approximately the same as it was in 1900 and 1890. It may be noted that the percentages given for the three censuses are comparable, but that the number of mortgaged and unmortgaged farms reported in 1890 is not entirely comparable with the numbers reported at the later censuses, because at the census of 1890 the farms for which no reports were secured were distributed between the two classes of mortgaged and unmortgaged farms.



The statement of mortgage debt and of the value of mortgaged farm property is restricted to the farms of those farmers who own all of their land and report the amount as well as the fact of indebtedness. Of the 9,636 farms reported as mortgaged, 8,019 are wholly owned by the farmers, and for 7,571 of these the amount of mortgage debt is reported. Only these last-mentioned farms are included under 1910 in the next table, which presents data relating to mortgaged farms for 1910 and 1890. In this connection it should be noted that in 1890 the amount of mortgage debt on the farms with incomplete reports was estimated according to the percentages and averages obtained from farms with full reports, but that no such estimate is here made for 1910. The table gives a comparative statement of the value of mortgaged farms owned entirely by their operators, and the amount of indebtedness, together with the average value of such farms, the average debt per farm, and the average equity per farm for 1910 and 1890. Data regarding the amount of mortgage debt were not obtained in 1900.

	Owned Farms or		Increase	
	Farm Homes Mortgaged			
	1910*	1890†	Amount	Per Cent
Number .....	7,571	3,929	.....	.....
Value—Land and buildings.....	\$77,332,068	\$17,205,433	.....	.....
Amount of mortgage debt.....	18,986,026	5,573,154	.....	.....
Per cent of debt to value.....	24.6	32.4	.....	.....
Average value per farm.....	10,214	4,379	\$5,835	133.2
Average debt per farm.....	2,508	1,418	1,090	76.9
Average equity per farm.....	7,706	2,961	4,745	160.2

\*Includes only farms consisting wholly of owned land and reporting value of farm and amount of debt.

†Includes all owned farm houses, estimates being made of value of farms and amount of debt for all defective reports.

The average debt of mortgaged farms increased in twenty years from \$1,418 to \$2,508, or 76.9 per cent, while the average value of such farms rose from nearly \$4,400 to over \$10,000, or 133.2 per cent. Thus the owners' equity increased on the average from almost \$3,000 to \$7,700, or 160.2 per cent. As a result of the greater relative increase in farm value than in farm debt, the mortgage indebtedness, which was 32.4 per cent of the value of the farm in 1890, had decreased to 24.6 per cent of this value in 1910.



## FARMS BY SIZE GROUPS, 1910 AND 1900

The following tables show the distribution of farms by size groups at the censuses of 1910 and 1900:

Total .....	46,170	24,700	21,470	86.9	100.0	100.0
Under 3 acres.....	569	794	-225*	-28.3*	1.2	3.2
3 to 9 acres.....	2,222	1,047	1,175	112.2	4.8	4.2
10 to 19 acres.....	2,279	1,032	1,247	120.8	4.9	4.2
20 to 49 acres.....	3,882	2,122	1,760	82.9	8.4	8.6
50 to 99 acres.....	4,384	2,526	1,858	73.6	9.5	10.2
100 to 174 acres.....	16,355	9,104	7,251	79.6	35.4	36.9
175 to 259 acres.....	3,004	1,573	1,431	91.0	6.5	6.4
260 to 499 acres.....	9,472	3,799	5,673	149.3	20.5	15.4
500 to 999 acres.....	2,426	1,466	960	65.5	5.3	5.9
1,000 acres and over.....	1,577	1,237	340	27.5	3.4	5.0

\* A minus sign (—) denotes decrease.

Over one-third of all farms in Colorado are between 100 and 174 acres in size, which limits include the quarter-section farms. About one-fifth are in the "260 to 499 acres" class, which limits include the half-section farms. These two groups also contain the greater number of farms in 1900.

A study of the distribution of farms by size groups discloses the fact that the greatest relative gain in number from 1900 to 1910 was made in the "260 to 499 acres" group, but the greatest absolute gain occurred in the "100 to 174 acres" group. The farms in the "260 to 499 acres" group constituted a much larger percentage in 1910 than in 1900. The number of places "under 3 acres" reported as farms is only about three-fourths as great as ten years ago. This decrease may be due to a different interpretation by the enumerators as to what to include as a small farm, or may represent an actual decrease in that type of farm. Every other group shows a considerable absolute and relative increase, but the movement is least marked among the farms over 500 acres in size.

The following table shows the total and improved acreage, and the value of land and buildings, for farms of various size groups, consolidating into one group the farms of less than 20 acres (numbering in all 5,070), and also the farms of between 175 and 499 acres (numbering 12,476):

Size Group	All Land in Farms (Acres)		Improved Land in Farms (Acres)		Value of Land and Buildings	
	1910	1900	1910	1900	1910	1900
Total .....	13,532,113	9,474,588	4,302,101	2,273,968	\$408,518,861	\$106,344,035
Under 20 acres.....	40,432	22,523	37,538	18,695	25,630,351	6,226,058
20 to 49 acres.....	126,209	72,403	99,671	50,844	28,470,967	4,921,212
50 to 99 acres.....	328,961	199,057	235,870	129,033	37,509,580	7,340,830
100 to 174 acres.....	2,526,569	1,409,466	978,512	607,094	93,753,309	24,226,545
175 to 499 acres.....	3,929,716	1,701,623	1,456,957	699,038	115,238,983	26,225,580
500 to 999 acres.....	1,699,403	1,043,856	557,631	297,601	40,327,319	11,735,660
1,000 acres and over.....	4,880,823	5,025,600	935,922	471,663	67,588,352	25,668,150

The following table shows the per cent distribution, by size groups, of the items presented in the preceding table, and also the number of farms:

Size Group	Per Cent of Total							
	Number		All Land		Improved Land		Value of Land and Buildings	
	of Farms		in Farms		in Farms			
	1910	1900	1910	1900	1910	1900	1910	1900
Total .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 20 acres.....	11.0	11.6	0.3	0.2	0.9	0.8	6.3	5.9
20 to 49 acres.....	8.4	8.6	0.9	0.8	2.3	2.2	7.0	4.6
50 to 99 acres.....	9.5	10.2	2.4	2.1	5.5	5.7	9.2	6.9
100 to 174 acres.....	35.4	36.9	18.7	14.9	22.7	26.7	22.9	22.8
175 to 499 acres.....	27.0	21.7	29.0	18.0	33.9	30.7	28.2	24.7
500 to 999 acres.....	5.3	5.9	12.6	11.0	13.0	13.1	9.9	11.0
1,000 acres and over....	3.4	5.0	36.1	53.0	21.8	20.7	16.5	24.1

Of the total farm acreage of the state in 1910, 36.1 per cent was in farms of 1,000 acres and over, and 29 per cent in farms of 175 to 499 acres; these two being from the standpoint of aggregate acreage the most important size group. The most notable change between 1900 and 1910 was the decrease in the proportion of the total acreage which was in farms of 1,000 acres and over, offset by increases in the proportion in every other size group, the increase for the farms of 175 to 499 acres being the most considerable.

As shown by the next table, the percentage of farm land improved diminishes as the average size of the farms increases. For this reason, and also because buildings have normally a higher value in proportion to farm acreage on small than on large farms, the average value of land and buildings per acre of land also diminishes with the increase in the size of the farms; it is very much higher for the farms under twenty acres in size than for those of any other group.

Size Group	Per Cent of Farm Land		Average Value of Land and Buildings			
	Improved		Per Farm		Per Acre	
	1910	1900	1910	1900	1910	1900
Total .....	21.8	24.0	\$ 8,848	\$ 4,305	\$ 30.19	\$ 11.22
Under 20 acres.....	92.8	83.0	5,055	2,167	633.91	276.43
20 to 49 acres.....	79.0	70.2	7,334	2,319	225.59	67.97
50 to 99 acres.....	71.7	64.8	8,556	2,906	114.02	36.88
100 to 174 acres.....	38.7	43.1	5,732	2,661	37.11	17.19
175 to 499 acres.....	37.1	41.1	9,237	4,882	29.33	15.41
500 to 999 acres.....	32.8	28.5	16,623	8,005	23.73	11.24
1,000 acres and over.....	19.2	9.4	42,859	20,750	13.85	5.11

COLOR AND NATIVITY OF FARMERS, 1910

Prior to the Thirteenth Census no attempt was made to secure information on the farm schedules concerning the nativity of farmers.

Four-fifths of the Colorado farmers were native whites, and almost one-fifth foreign-born whites. Only 574, or 1.2 per cent of all farmers, were non-whites, 405 being Indians, 87 Japanese, 81 negroes, and 1 Chinese. About four-fifths of each color and nativity group were reported as owners, most of the remaining one-fifth (nearly 19 per cent) being tenants.

Of the 8,398 foreign-born white farmers in Colorado in 1910, 1,128 were born in Sweden, 882 in England, 734 in Russia, 643 in Canada, 539 in Italy, 462 in Austria, 451 in Ireland, 434 in Denmark, 294 in Scotland, 242 in Switzerland, 176 in Norway, 111 in Wales, 101 in France, and 87 in Holland. Other European countries were represented by a total of 160 farmers, and non-European countries, other than Canada, by twenty-eight.

The table which follows shows the color and nativity of farm operators by character of tenure for 1910:

Color and Nativity	Farm Operators								
	Total			Per Cent of Total					
	Number	Per Cent	Distribution	Owners	Tenants	Managers	Owners	Tenants	Managers
Total .....	46,170	100.0		36,993	8,390	787	80.1	18.2	1.7
Native white.....	37,198	80.6		29,801	6,711	686	80.1	18.0	1.8
Foreign-born white.....	8,398	18.2		6,726	1,572	100	80.1	18.7	1.2
Negro and other non-white.	574	1.2		466	107	1	81.2	18.6	0.2

VALUE OF FARM PRODUCTS, 1911

Colorado farm products brought \$89,858,000 to the farmers of the state in 1911. This is more than \$100 for every man, woman, and child in the state. The total value of the Colorado crop for 1910 was given by the Bureau of Statistics of the Department of Agriculture as \$31,752,000, and for 1911 the same crops are given by the same bureau in a final report, total value \$33,820,000.

All estimates by the bureau have been revised on the basis of the census showing for the crops of 1909. That year was a good one agriculturally, while 1911 was poor. The official figures for the crops of Colorado, quantitatively reported in 1911 and 1909, are:



Crop	1911	1909
Corn .....	\$ 4,073,000	\$ 3,432,000
Winter wheat .....	2,691,000	.....
Spring wheat .....	4,259,000	.....
All wheat .....	6,950,000	6,718,000
Barley .....	1,481,000	1,247,000
Rye .....	176,000	145,000
Potatoes .....	3,118,000	6,715,000
Hay .....	13,150,000	*15,120,000
Oats .....	4,872,000	4,051,000
Flaxseed .....	38,000	47,000
Total .....	\$33,858,000	\$37,475,000

\*Crop of 1910.

It will be noted that the value of wheat, barley, rye, and oats was each greater for 1911 than for 1909, and if the Colorado potato crop for 1911 had been up to the average, there would have been little difference in the totals in spite of the dry weather of 1911.

#### ALL FARM PRODUCTS

The value of all farm products of Colorado in 1911, taking the official figures of the Department of Agriculture and estimates by experts based on census figures on the value of other products, was:

Crop	Value, 1911
Crops quantitatively estimated.....	\$33,858,000
Fruits .....	6,782,320
Honey .....	327,000
Emmer, spelt, buckwheat, kaffir corn, milo maize, broom corn .....	269,033
Alfalfa seed .....	191,001
Dry beans and peas.....	558,952
Sweet potatoes .....	5,280
Dairy products .....	6,114,317
Cattle .....	13,490,000
Horses and mules.....	6,194,061
Hogs .....	2,569,000
Sheep and goats.....	2,082,000
Wool .....	1,113,076
Poultry and eggs .....	2,665,545
Vegetables for table, canning, pickling, melons.....	8,276,335
Sugar beets .....	5,362,080
	————— \$89,858,000

The following are official figures on the acreage in each crop in Colorado in 1911 and 1910:

Crop	1911	1910
Corn .....	\$ 373,000	\$ 346,000
Winter wheat .....	178,000	153,000
Spring wheat .....	260,000	250,000
Barley .....	74,000	75,000
Rye .....	21,000	20,000
Potatoes .....	90,000	86,000
Hay .....	707,000	700,000
Oats .....	290,000	284,000
Flaxseed .....	3,000	3,000
Total .....	\$1,996,000	\$1,917,000

Per cent gain in one year.....4.12

The 1911 yield of winter wheat in Colorado was 18 bushels to the acre; for the United States only 14.8 bushels.

#### BIG SPRING WHEAT YIELD

The 1911 yield of spring wheat in Colorado, 19.5 bushels per acre, was nearly double the average yield for the entire country, which was only 9.4 bushels.

The average yield per acre of barley in Colorado in 1911 was 29 bushels; in the United States, only 21 bushels.

The average yield of potatoes in Colorado in 1911 was only 35 bushels per acre, against a ten-year average of 135 bushels.

The average yield per acre of hay in Colorado in 1911 was 2 tons, against an average for the entire country of only 1.1 tons.

Colorado's oats crop in 1911 averaged 35 bushels to the acre, against an average of 24.4 bushels for the nation.

#### VALUE OF FARM PRODUCTS, 1912

The greatest farm-crop year in the history of Colorado, and stupendous advances in agricultural production in this state as compared with other states, are graphically portrayed in statistics issued by the United States Department of Agriculture for 1912.

In every commodity of the field produced in Colorado the yield of 1912 has far outstripped the records of previous seasons. Colorado's wheat production jumped to 10,000,968 bushels—nearly 2,000,000 over the yield of 1911 and nearly 4,000,000 bushels over 1909. Colorado's wheat area is now 453,000 acres,

as against 438,000 acres in 1911. Its value is over \$8,000,000, as against less than \$7,000,000 in 1911. The yield per acre, 1912, was 24.2 bushels; in 1911, 18.92 bushels.

Colorado has in hay 870,000 acres, with a production of 1,905,000 tons. In 1911 there were 785,000 acres, with a yield of 1,570,000 tons. Colorado farmers realized \$16,500,000 on their crops in 1912; the previous year, \$1,000,000 less. This is based on average price paid to farmers on December 1, which was \$8.70. In 1910 the price ranged around \$10.80 per ton. The yield of hay per acre in 1912 was 2.19 tons; in 1911, 2 tons.

Although the oat-crop area remained stationary as compared with the previous year, there were raised on 290,000 acres 12,000,412 bushels, against 10,150,000 bushels in 1911. On December 1 basis, the farmers received less than in 1911 for their crop, realizing \$4,700,000, as compared with \$4,872,000 in 1911. Yield per acre, 1912, 42.8 bushels; 1911, 35 bushels. This yield outstrips any previous year by nearly three bushels per acre. Colorado handled 957,142 tons of sugar beets this year, at an average value of \$5.55 per ton.

There were 124,800 tons of sugar manufactured; 86,437 acres were harvested, this state standing third in production, California and Michigan being ahead.

The acreage of corn in Colorado in 1912 jumped to 420,000—an increase of 47,000 over 1911. The crop brought farmers \$4,368,000, against \$4,073,000 in 1911. The corn crop in 1909 was \$3,432,000. The production was 8,000,736 bushels—an increase of \$3,500,000 bushels over last year. Yield per acre, 20.8 bushels; last year, 14 bushels.

A reduction of the Colorado potato acreage by 5,000 acres had no effect on the yield. There were 8,375,000 bushels, as compared with 3,150,000 last year. Value of crop, \$3,000,311; last year, \$3,118,000. In 1909 the state raised 11,000,700 bushels at a valuation of \$6,000,715. The yield per acre this year was 95 bushels, as against 35 bushels last year, and 137 in 1909.

The yield of barley in 1912 increased by nearly 1,000,000 bushels. Seventy-six thousand acres were under cultivation. The crop brought \$1,482,000, based on the price December 1.

In rye and flaxseed Colorado practically doubled the production over 1911; 25,000 acres of rye and 12,000 acres of flax seed were cultivated.

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#### NUMBER OF ACRES OF STATE-OWNED LANDS BY COUNTIES

Colorado sold 79,639.33 acres of its lands during the two years ending November 30, 1912, and realized approximately \$1,000,000 for it. The state has had 2,167,332.93 acres under lease, realizing in rentals \$209,136.43. There are 1,171,138.59 acres of state land vacant.



Colorado now owns 3,332,751.76 acres, of which 2,039,977.32 acres are grazing land, 67,719.13 acres agricultural, 21,876.11 coal, 1,140 acres mineral, and 6,620.37 acres listed in the miscellaneous column. The state received in rental in the last biennial period \$31,366.80 from agricultural lands, \$102,585.36 from coal lands, \$12,140 from mineral lands, and \$6,538.42 from miscellaneous lands.

When Colorado was admitted to the Union, the federal government made a grant to the state of two sections of land in every township, the lease and sales proceeds to go to the school funds. Sections 16 and 36 were the usual selections. Certain counties were Indian reservations when Colorado became a state, and have not been state lands. The state received in other districts sections in lieu of lands in these counties. The proceeds from sales and rentals are divided among all counties, regardless of whether they have state lands, according to their school population.

This list shows location of state lands and lands sold in the last biennial period:

Counties	Lands Sold	Now
		Owned by State
Adams .....	\$ 1,924.08	\$ 39,207.48
Arapahoe .....	320.00	26,452.20
Archuleta .....	320.00	28,275.00
Baca .....	10.00	88,448.38
Bent .....	1,599.70	138,789.54
Boulder .....	1.00	7,956.68
Chaffee .....	160.00	26,776.68
Cheyenne .....	3,360.00	52,119.10
Clear Creek .....	.....	6,534.41
Conejos .....	7,949.56	63,831.74
Costilla .....	.....	44,881.43
Crowley .....	.....	61,898.64
Custer .....	240.00	13,466.75
Denver .....	81.60	686.60
Dolores .....	.....	13,280.00
Douglas .....	1,040.00	14,343.62
Eagle .....	472.52	22,648.45
Elbert .....	6,877.64	120,144.97
El Paso .....	867.47	222,774.07
Fremont .....	1,065.67	55,195.00
Gilpin .....	.....	2,800.00



Counties	Now	
	Lands Sold	Owned by State
Grand .....	1,404.50	71,662.68
Gunnison .....	.....	16,715.00
Hinsdale .....	.....	14,480.00
Huerfano .....	.....	49,738.55
Jackson .....	160.00	61,270.71
Jefferson .....	744.04	16,955.31
Kiowa .....	11,360.00	80,019.77
Kit Carson .....	317.82	63,539.68
Lake .....	.....	1,564.25
La Plata .....	.....	24,057.25
Larimer .....	1,822.83	75,542.42
Las Animas .....	1,170.64	145,602.70
Lincoln .....	3,146.17	149,476.86
Logan .....	1,026.95	152,625.36
Mineral .....	235.94	4,474.06
Moffat .....	1,558.32	184,863.48
Montezuma .....	1,811.29	45,930.25
Morgan .....	160.00	62,877.08
Otero .....	2,449.02	82,530.83
Ouray .....	.....	2,670.72
Park .....	120.00	87,890.15
Phillips .....	954.95	21,824.93
Pitkin .....	.....	3,750.00
Prowers .....	1,140.87	56,690.22
Pueblo .....	3,495.92	181,481.73
Rio Grande .....	1,498.42	29,495.42
Routt .....	3,899.83	80,730.90
Saguache .....	5,339.73	104,993.41
San Juan .....	.....	10,760.00
San Miguel .....	.....	31,158.27
Sedgwick .....	320.00	31,845.38
Summit .....	.....	1,271.00
Teller .....	.....	14,631.80
Washington .....	800.00	91,960.00
Weld .....	1,153.57	156,062.33
Yuma .....	6,429.38	71,178.43
Totals .....	\$79,639.33	\$3,332,751.76

VALUE OF LIVE STOCK, 1912-1913  
(U. S. Report, Department of Agriculture)

	Jan. 1, 1913	Jan. 1, 1912	Per Cent Increase
Horses .....	\$28,188,000	\$25,680,000	10
Mules .....	1,768,000	1,700,000	4
Milch cows .....	9,254,000	7,849,000	18
Other cattle .....	31,406,000	25,420,000	23
Sheep .....	6,253,000	4,737,000	32
Swine .....	2,255,000	1,688,000	34
Totals .....	\$79,124,000	\$67,074,000	17.8

The number of horses in the state is 324,000, or an increase of 1 per cent for the year. The value per head increased from \$80 to \$87, which represents \$23 per head above the ten-year average.

There are 172,000 milch cows in the state, or a gain of 3 per cent in the year. The average price advanced from \$47 to \$53.80, which is \$17.20 above the ten-year average. The number of mules increased 2 per cent, bringing the total up to 17,000, and advancing the average price from \$100 to \$104.

The total number of cattle in Colorado is placed at 921,000, selling at an average value of \$34.10 per head. The figures show that the average price in Colorado is \$8 above the national average.

### AGRICULTURAL OPPORTUNITIES IN COLORADO

#### CLIMATE AND SOIL

The climate is free from extremes of temperature; the mean annual temperature for the plains and valleys is about forty-five degrees. The annual rainfall ranges from ten to twenty-two inches in the farming districts. There are more than 300 days of sunshine in every year.

Colorado is still adding to its farm acreage, but the mountainous surface and low rainfall render some areas unfit for agriculture, while others are adapted only to grazing. The mean altitude of Colorado is the highest of any state in the Union. Only one-fourth of the state lies at an elevation of less than 5,000 feet, while two-thirds ranges in altitude from 6,000 to 14,000 feet above sea-level. The central and west portions of the state comprise a large area of the mountainous mass of the Rockies.

Two-fifths of Colorado lies within the Great Plains section of the United States and consists of a long slope from the eastern front of the Rocky Mountains, descending from altitudes of 7,000 feet to altitudes of approximately 3,500 feet within the prairie section along the eastern border. In these sloping areas the eastward-flowing rivers have cut deep, narrow valleys, which are bordered by silty and sandy alluvial soils at the lower levels, and by sandy and gravelly loam bench-lands at higher altitudes.

Within the central mountain mass there are numerous parks and smaller valleys, the floors of which are formed from alluvial or lacustrine deposits. Wherever water is available and the altitude is not too great, these are irrigated for the production of vegetables, grain, grass, and fruit. To the west of the great mountain divide the precipitation is generally too light for the growing of crops without irrigation; but the streams supply large volumes of water for irrigation in the valleys. To the east of the divide, on the plains, the rainfall is heavier; and some crops are grown without irrigation throughout this region. Here, however, near the streams, irrigation has been introduced, the largest irrigated areas in the state being in the valleys of the South Platte and Arkansas Rivers, extending from the mountains to the eastern boundary of the state.

#### IRRIGATION

Of the 46,170 farms in the state, 25,926, or 56.2 per cent, are reported as irrigated. The area reported is 2,792,032 acres, or 64.9 per cent of the improved land in farms. The area to which enterprises existing in 1910 were capable of supplying water was 3,990,166 acres, and the total area included in irrigation projects completed or under way was 5,917,457 acres. The United States Reclamation Service reports on its Grand Valley project in Mesa County as follows:

Irrigable area: 53,000 acres. Present status of irrigable lands: 19,620 acres entered subject to the reclamation act, 10,450 acres withdrawn from entry, 22,930 acres in private ownership. Length of irrigation season: from April 1 to October 31, 214 days. Character of soil of irrigable area: sandy loam, sandy mesas, and adobe. Principal products: fruits, sugar beets, alfalfa. Principal markets: large cities east of Rocky Mountains for fruit; other products, local.

On its Uncompahgre Valley project, season of 1911, the Reclamation Service reports:

Some of the landholders have subdivided their holdings, and many sales of small tracts to new settlers have been made. The crop statistics gathered for the season of 1910 showed the following areas in cultivation within the limits of the project:

Alfalfa, 22,100 acres; oats 3,075 acres; orchards, 5,650 acres; wheat, 1,425 acres; beets, 2,000 acres; potatoes, 2,950 acres; garden, 275 acres; corn, 125 acres. Of the area cultivated, 24,000



acres were furnished water from the government canals and 13,500 acres from the private ditches in the valley. On the land supplied with water from Gunnison River excellent crops were raised, and for the first time in several years a third cutting of alfalfa was secured. Prices were good, and the farmers, as a whole, were prosperous, though a partial failure of the fruit crop carried hardship to those who were dependent entirely upon that crop.

#### CROPS

The leading field crops of the state, in the order of their importance, as judged by total value in 1909, are: hay and forage, \$17,282,000; wheat, \$6,464,000; oats, \$4,177,000; potatoes, \$3,705,000; corn, \$2,674,000; and barley, \$1,101,000. Of the totals for hay and forage crops, alfalfa contributes nearly two-fifths of the acreage and over one-half of the quantity and value. Next below alfalfa, in both acreage and value, are "wild, salt, or prairie grasses."

Alfalfa takes the place of clover and timothy. Three cuttings are taken from the fields, each yielding from one to two tons, the yield at the end of the year often being as high as seven tons to the acre. Four tons per acre is a conservative average yield estimate for the state. It is worth from \$5 to \$10 a ton in the stack, or \$7 to \$15 if delivered at the market. It costs about \$2 a ton to raise.

Of the total acreage in wheat, nearly one-half is common spring wheat and a little more than one-seventh is durum or macaroni. Of the cereals, oats ranks second in value and third in acreage, while corn is second in acreage and third in value. Among other sundry crops, aside from potatoes, which rank as a leading crop of the state, dry peas, alfalfa seed, dry edible beans, and broom corn rank highest according to value. The average value per acre of all cereals combined is \$13.98.

Most of the corn of the state is grown east of the mountains, the leading corn-growing counties being Yuma, Kit Carson, Phillips, Washington, and Elbert, which report more than half of the total corn acreage.

Many European immigrants have established themselves on gardens near the principal cities of Colorado, either on rented or purchased land, and they get large incomes from small tracts; but there is room for more, as the value of garden products shipped into Colorado annually from other states amounts to \$3,000,000. Both prices and rentals of garden land are high; but the income corresponds, and it takes very little capital to get a start in gardening, as the rent does not have to be paid in advance, and the land begins to bring in money from the very start. Some of the garden crops in which there is large profit are celery, cabbage, cauliflower, onions, asparagus, peas, beans, cucumbers, and tomatoes. In quality the celery and other vegetables grown in Colorado are first class, and they bring high prices.



Colorado potatoes are famous. The average yield of high-quality potatoes on irrigated land in Colorado is 200 bushels per acre. Many of the yields go over 300 and 400 bushels per acre. Although the best-known potato-producing district is around Greeley, in Weld County, other sections of the state are rapidly coming to the front as good potato lands. These districts are: San Luis Valley, Uncompahgre Valley, Durango and vicinity, Routt, Moffat, and Garfield Counties. Fine potato land can be bought for \$45 an acre up.

The growing of sugar beets is an important industry. The climate and soils of the state are well adapted to the successful cultivation of this important commercial vegetable. (See further information about sugar-beet culture under "Prices of Farms and Inducements to Settlers.")

Colorado apples, peaches, and other orchard products command the top of the market in eastern centers. Colorado is one of the leading fruit-producing states of the West. Although good fruit land is rather high in price—\$100 to \$200 an acre for raw land—returns from the orchard lands are proportionately large. Gross yields of \$200 to \$1,000 worth of fruit on an acre are not uncommon.

There is an opportunity for immigrants in the markets of Colorado for small fruits, such as strawberries, raspberries, dewberries, and grapes. Small fruits can be combined with truck gardening, yielding quicker and nearly as large profits as the tree fruits, when raised in this way.

#### STOCK-RAISING

Of the total number of farms enumerated in 1910, 43,033, or 93.2 per cent, reported domestic animals of some kind, the number without any domestic animals being 3,137. Of all the farms in the state, 74.1 per cent report cattle; 70.7 per cent, "dairy cows;" and only 25.2 per cent, "other cows." The average number of dairy cows per farm reporting is only about five, while the average number of cows not kept for milk, per farm reporting that class, is about thirty-five.

The value of horses and colts is about nine-tenths that of cattle, and the two together represent about 83 per cent of the value of all live stock. The value of poultry in the state is now nearly two-thirds as great as that of swine and nearly one-sixth as great as that of sheep. The average value of bees per farm reporting was \$43.18 in 1900 and \$86.61 in 1910. About seven farms in every hundred report bees. Colorado imported \$4,000,000 worth of dairy products last year to supply her own markets. Dairying is carried on in the dry-farming sections as well as in the irrigated districts.

Opportunities for farmers to raise cattle and sheep in small herds are unlimited. The day of huge sheep and cattle herds is past in Colorado, and the small cattleman and sheep-raiser must

now supply the demand. There are big profits in hog-raising, especially in the San Luis Valley. Over \$10,000,000 worth of cattle and other live stock is brought to Colorado from other states for consumption here, so that all stock-raisers have a good home market. Raising horses and mules is profitable, both because of the very good prices they bring and because of the ease in raising them in Colorado's dry, rare climate.

Poultry-raising affords a good opportunity to the immigrant, because the returns are quick, the investment comparatively small, and the products always in demand at profit-yielding prices. Hens are good money-makers on both irrigated and dry farms. On the homesteads of eastern Colorado, or land that can be bought for \$5 to \$20 an acre in the same part of the state, drought-resisting crops will always provide food for poultry. Eggs average from 20 to 30 cents a dozen the year around, sometimes going to 60 cents. Live poultry brings from 10 to 20 cents a pound. About \$4,000,000 worth of poultry products is imported into Colorado every year.

#### PRICES OF FARMS AND INDUCEMENTS TO SETTLERS

The total area of the state is 66,560,000 acres. Arable area, 22,400,000 acres; irrigable area, 6,000,000 acres; area now under irrigation, 2,528,000 acres; area adapted to dry-farming and stock-raising, 20,000,000 acres.

There are still about 19,000,000 acres of government land open to entry in Colorado. About 6,500,000 acres of this government land are adapted to agriculture. Immigrants who have declared their intention to become citizens of the United States may obtain not to exceed 320 acres of this land in one or more of the following ways:

Under the homestead act: limit, 160 acres; no charge for the land.

Under the enlarged homestead act: limit 320 acres; no charge for the land.

Under the desert-entry act: limit, 320 acres; price \$1.25 an acre; minimum improvements required, \$1 per acre a year for three years; usual cost of putting water on the land, \$30 to \$40 an acre.

Area of state lands, 3,412,391; area of Carey Act lands now open, 40,000 acres. Minimum price of state lands, \$3.50 an acre; average price last year, \$11.59 per acre. Terms on state land selling for less than \$25 an acre, 10 per cent down and balance in eighteen annual payments at 6 per cent interest. State lands for grazing and farming may be leased; rental, from 12 cents an acre up.

Prices of irrigated land range from \$50 to \$200 an acre. The usual terms are one-fourth to one-half down, and balance in three to seven years. Good irrigated land will yield an income of 25 per cent annually on its valuation, and often pays



for itself in two or three years—occasionally in one. Irrigated land may be rented, either on shares or for cash.

Many Europeans who came to Colorado with practically nothing a few years ago, and are now prosperous farmers, got their start by leasing land from the beet-sugar companies. These companies will lease land, buildings, and equipment, and provide expert advice to the lessees. In this way the immigrant becomes familiar with farming under irrigation and other local conditions, and the step from the condition of tenant to that of owner is facilitated with a minimum of risk.

The average value of a Colorado farm, including equipment, has advanced during the last decade from \$6,520 to more than \$10,600, of which over \$8,800 represents the value of land and buildings, over \$1,500 the value of live stock, and nearly \$300 the value of implements and machinery. The average value of land and buildings is now \$30.19 an acre, or somewhat less than three times as much as ten years ago.

#### FARM EXPENSES

Almost half of the farmers hire labor, and the average amount expended by the farmers hiring is \$487.78. A little less than one fifth of the amount reported as expended for labor is in the form of rent and board. During the ten-year period 1899 to 1909 the total expenditure for labor increased 163.8 per cent. About two farmers out of every five report some expenditure for feed, but only about one out of every hundred purchased fertilizer. The total amount reported as paid for fertilizer shows an increase of 163.1 per cent since 1899, the average per farm reporting being \$109.13.

#### GENERAL AND SPECIAL INDUCEMENTS

Although the metal output of the state in 1910 was \$33,000,000, the coal output \$24,000,000, and the value of the products manufactured \$112,000,000, agriculture and fruit-growing probably offer the best opportunities to immigrants. It is especially easy for them to get a start in truck-farming and beet-growing, even though they have but little money. To take advantage of the opportunity to acquire free land from the government a larger capital is necessary, in order to secure equipment and provide support for the family until the land can be made productive.

Colorado wants immigrants, and can offer them exceptional opportunities for becoming established and acquiring a competence. They can find work in the beet fields and truck gardens. They can take up free homesteads, buy small tracts of irrigated land on easy terms, or rent land for beet-growing, truck-gardening, etc.; and in the fact that the state imports annually between \$30,000,000 and \$40,000,000 of farm products there is assurance of a good cash market at high prices for all that can be raised by 30,000 more farmers.

As regards school advantages in Colorado, the schools of La Plata County may be taken as representative of educational opportunities in the state. The county superintendent of schools reports twenty-nine school districts, costing over \$78,000 a year, with the rural schools steadily increasing.

Commercial clubs and farmers' organizations, such as the farmers' unions and granges, are ready to assist newcomers to get located and started right.

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### COLORADO SOIL LEADS NATION IN FERTILITY

Conclusive evidence of the superiority of the agricultural lands of Colorado over those of almost every other state in the Union is given in the Agricultural Bulletin of the Census Bureau for the Thirteenth Census.

The report contains general information showing the growth and development in agriculture of each state in the decade between 1899 and 1909. The figures show that Colorado's acreage of cultivated area has increased more rapidly than that of any other state, with the exception of small sections in the Rocky Mountain district. But the greatest increase has been in the yield per acre, as is shown by a comparison of the percentage of increase in acreage, as compared with the percentage of increase in production.

### CEREALS MAKE BIG INCREASE

The percentage of increase in acreage cultivated in cereals of all kinds in the decade was 101.4. The percentage of increase in the production of all cereals during the period was 214.6, showing that the yield per acre increased much more rapidly than the acreage.

In the production of corn during the same period the increase in acreage was 283 per cent, and the increase in yield was 425.8 per cent. The same general relation between increase in acreage and increase in total production holds good for other crops.

The acreage of all cereals cultivated in Colorado in 1909 was 1,057,905, as compared with 525,299 for 1899.

The Rocky Mountain district, all tributary to Denver markets, showed by far the largest increase in acreage of cultivated agricultural lands. The same section also showed fully thirty times as great a percentage of increase in production as any other geographical section of the country.

### HAY CROP LARGEST

The increase in the acreage of hay and forage produced was 35 per cent, and the increase in yield was but 36.4. The increase in value of crops was 111.8 per cent, due to the enormous advance in the value of hay in the past few years. The acreage cultivated in hay and forage crops in the state is larger than for any other crop, being 1,285,061 acres.



## POTATO PRODUCTION BEST

The record for the production of potatoes is one of the best shown by the report. While most of the potato-growing sections are showing decreases in the yield per acre, Colorado showed a most promising increase, proving that Colorado's soil is increasing in productivity, while that in older sections of the country is becoming less productive from year to year. The increase in acreage of potatoes cultivated was 94.8 per cent, while the increase in yield was 163.8 per cent.

## COLORADO SUGAR-BEET INDUSTRY IN 1911 AND 1912

	1912	1911	Increase
Tons of beets paid for.....	\$ 1,690,595	\$ 964,000	\$ 726,595
Money paid to farmers.....	9,877,299	5,362,080	4,515,299
Money paid factory laborers.....	2,324,800	1,329,000	995,800
Money paid field laborers.....	2,393,300	1,620,000	773,300
Money paid for supplies.....	2,060,000	1,205,000	855,000
Money invested in factories exclusive of land .....	22,600,000	19,250,000	3,350,000
Number of factories.....	17	17	.....
Sugar produced, pounds.....	454,770,055	236,454,000	218,316,055
Factory value of sugar.....	20,782,991	10,569,493	10,213,497

## BEET GROWERS' CONTRACTS WITH SUGAR COMPANIES

That the farmers are not reaping the profits from the enormous increase in the price of their products was never better illustrated than in the enormous and unwarranted profits of the Sugar Trust. The government in its suit to dissolve the Sugar Trust introduced the following letter written by Mr. Morey, of Colorado, to Mr. Washington B. Thomas, of Wall Street, New York, then acting as president of the Sugar Trust:

"You will notice this year that, in addition to the regular 2½ per cent depreciation which we have been deducting, we have set aside \$1,000,000 as depreciation reserve. I did not want this year's earnings to appear as large as they would if we had not made this entry. You will note that our total surplus, as shown by these statements, is a little over \$5,000,000. The actual surplus is nearer \$9,000,000 than \$5,000,000."

It would appear that a company that can make \$9,000,000 profit in one season was not in need of any great amount of "protection" for American labor. The facts are that there is a

small amount of "American labor" employed in the beet fields of Colorado, Japanese, Mexicans, and other foreigners being mainly employed, to the exclusion of "American labor."

Mr. Albert Dakin, attorney for the beet-raisers, in a statement to his clients says in part:

"If the Great Western Sugar Company had paid to its growers in northern Colorado for their beets a price equal to that received by the Michigan growers for the past six or seven years (p. 3406, Hardwick Hearings), the northern Colorado farmers would have gotten about twelve million dollars in excess of the amount they did get for the beets actually raised. It is needless to say this extra amount of cash scattered among our 4,000 growers would have made that period of short crops and panic a period of prosperity for both farmers and business men with whom they trade. Even the Arkansas Valley contract in force up here would have added millions to the farmers' pockets during the panic and short-crop period.

"Later reports are said to show that the Great Western has a surplus of about \$13,000,000, and that it desisted from building a skyscraper business block in Denver lest that be too plain evidence of its enormous profits.

"The officers of the Great Western say it does not pay more because its growers don't ask for more.

"Michigan farmers asked for more (pp. 3337, 3406, and 3526, Hardwick Hearings) and got better than \$2 per ton above what our farmers get."

The difference between the contracts made between the growers and the American Beet Sugar Company and the Great Western Sugar Company is here shown:

"Memorandum of Agreement Between....., Grower, and the American Beet Sugar Company.

"4. Beets delivered and accepted will be paid for by the company at the rate of \$5 per ton for beets testing 12 per cent sugar, and 33 1/3 cents additional for each per cent, fractions in proportions.

"5. The company will pay 50 cents per ton additional for beets siloed and delivered; siloed beets shall not be delivered except upon call of the company.

"7. The company will give to the grower, at the factory without charge, beet pulp not exceeding 20 per cent of the weight of the beets delivered by him under this contract, providing the grower gives written notice to the company, previous to July 1 of the quantity desired, the pulp to be taken by the grower during the time of slicing, as the company may direct."

## American Beet Sugar Co.

## Great Western Sugar Co.

For Beets Testing—	Price	For Beets Testing—	Price
12 per cent.....	\$5.00	12 per cent.....	\$5.00
13 per cent.....	5.33 1-3	13 per cent.....	5.00
14 per cent.....	5.66 2-3	14 per cent.....	5.125
15 per cent.....	6.00	15 per cent.....	5.375
16 per cent.....	6.33 1-3	16 per cent.....	5.625
17 per cent.....	6.66 2-3	17 per cent.....	5.875
18 per cent.....	7.00	18 per cent.....	6.125
19 per cent.....	7.33 1-3	19 per cent.....	6.375
20 per cent.....	7.66 2-3	20 per cent.....	6.625
21 per cent.....	8.00	21 per cent.....	6.875
22 per cent.....	8.33 1-3	And so on, accounting only for each half per cent of the sugar in the beets. Beet pulp, 50 cents per ton.	
23 per cent.....	8.66 2-3		
24 per cent.....	9.00		
25 per cent.....	9.33 1-3		

It will be noticed that the American Beet Sugar Company gives the growers beet pulp, while the Great Western charges 50 cents per ton for it.



## CHAPTER VII

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### MANUFACTURES OF COLORADO

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#### STATISTICS OF MANUFACTURES FOR THE STATE, CITIES, AND INDUSTRIES

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##### IMPORTANCE AND GROWTH OF MANUFACTURES

Colorado is pre-eminently a mining state, but at each census from 1869 to 1899 the proportion which the value of its manufactures formed of the total value of the manufactures of the United States increased steadily. Since 1899, however, this proportion has decreased, amounting to eight-tenths of 1 per cent in that year, seven-tenths of 1 per cent in 1904, and six-tenths of 1 per cent in 1909. During this period of forty years the gross value of products per capita of the entire population of the state increased from \$72 in 1869 to \$163 in 1909.

Much of the manufacturing activity of the state—such as smelting, iron and steel operations, cement, and marble and stone work—is dependent upon the development of its extensive mineral resources. Furthermore, many manufacturing establishments owe their existence to the needs of the mining industry.

Irrigation of the fertile valleys of the Platte and Arkansas Rivers and other streams has made the beet-sugar production of Colorado greater than that of any other state. The canning industry is also the outgrowth of the development of irrigation in the state. Coal and timber as fuel for industrial consumption and timber as manufacturing material are abundant, and in general accessible.

The fact that Colorado is a natural grazing country has been responsible for the development of such industries as slaughtering and meat-packing, the manufacture of butter, cheese, and condensed milk, the rendering of grease and tallow, and wool-scouring.

The following table gives the most important figures relative to all classes of manufactures combined for the state as returned at the censuses of 1909, 1904, and 1899, together with the percentage of increase from census to census:

	Number or Amount		Per Cent of Increase		
	1909	1904	1899	1904-1909	1899-1904
Number of establishments.....	2,034	1,606	1,323	26.7	21.4
Persons engaged in manu- factures .....	34,115	25,888	*	31.8	*
Proprietors and firm members	1,722	1,398	*	23.2	*
Salaried employes .....	4,326	2,677	1,870	61.6	43.2
Wage earners (avg. number).	28,067	21,813	19,498	28.7	11.9
Primary horse-power .....	154,615	124,907	43,434	23.8	187.6
Capital .....	\$162,668,000	\$107,664,000	\$ 58,173,000	51.1	85.1
Expenses .....	114,690,000	88,282,000	77,748,000	29.9	13.6
Services .....	25,560,000	18,649,000	13,767,000	37.1	35.5
Salaries .....	5,648,000	3,549,000	2,059,000	59.1	72.4
Wages .....	19,912,000	15,100,000	11,708,000	31.9	29.0
Materials .....	80,491,000	63,114,000	60,751,000	27.5	3.9
Miscellaneous .....	8,639,000	6,519,000	3,230,000	32.5	101.8
Value of products.....	130,044,000	100,144,000	89,068,000	29.9	12.4
Value added by manufacture (value of products less cost of materials) .....	49,553,000	37,030,000	28,317,000	33.8	30.8

\*Figures not available.

In 1909 the State of Colorado had 2,034 manufacturing establishments operating under the factory system, which gave employment to an average of 34,115 persons during the year and paid out \$25,560,000 in salaries and wages. Of the persons employed, 28,067 were wage-earners. These establishments turned out products to the value of \$130,044,000, to produce which materials costing \$80,491,000 were consumed. The value added by manufacture was thus \$49,553,000, which figure, as explained in the Introduction, best represents the net wealth created by manufacturing operations during the year.

In general this table brings out the fact that the manufacturing industries of Colorado as a whole showed a greater development during the more recent five-year period 1904-1909 than during the preceding five-year period 1899-1904. During the later period the number of establishments increased 26.7 per cent and the average number of wage-earners 28.7 per cent, while the value of products increased 29.9 per cent and the value added by manufacture 33.8 per cent. As pointed out in the Introduction, it would be improper to infer that manufactures increased in volume to the full extent indicated by these figures

regarding values, since the increase is certainly due, in part, to the increase that has taken place in the price of commodities. It is interesting to note that the percentage of increase for total expenses from 1904 to 1909, 29.9, is exactly the same as that shown for value of products and that the percentages of increase for number of establishments, average number of wage-earners, and cost of materials vary but little from that percentage. No decreases are shown for either five-year period.

The relative importance and growth of the leading manufacturing industries of the state are shown in the following table:



	Wage Earners	Value of Products		Value Added by Manufacture		Per Cent of Increase*	
		Number of Establishments	Per Cent Distribution	Amount	Per Cent Distribution	Value of Products 1904-1909	Value Added by Manufacture 1904-1909
INDUSTRY						1904-1909	1904-1909
ALL INDUSTRIES .....		2,034	100.0	\$130,014,000	100.0	29.9	33.8
Slaughtering and meat packing.....		13	2.3	9,657,000	7.4	190.5	151.3
Flour-mill and grist-mill products.....		77	1.0	7,868,000	6.1	36.1	21.3
Printing and publishing.....		439	8.4	6,962,000	5.4	27.3	24.1
Cars and general shop construction and repairs by steam-railroad companies.....		29	3.993	6,559,000	5.0	24.7	52.3
Foundry and machine-shop products.....		111	1.813	5,907,000	4.5	43.8	42.7
Lumber and timber products.....		263	7.8	4,155,000	3.2	67.6	64.9
Bread and other bakery products.....		250	3.2	3,969,000	3.1	49.4	42.9
Liquors, malt .....		11	4.24	3,311,000	2.5	56.2	44.6
Butter, cheese, and condensed milk.....		39	0.7	2,340,000	1.8	81.4	99.0
Brick and tile.....		69	3.3	1,670,000	1.3	104.4	77.5
Canning and preserving.....		30	518	1,528,000	1.2	86.1	118.4
Leather goods .....		30	269	1,054,000	0.8	82.7	61.4
Confectionery .....		35	349	1,023,000	0.8	49.3	25.8
Tobacco manufactures .....		99	427	1,021,000	0.8	4.3	3.1

INDUSTRY	Wage Earners		Value of Products		Value Added by Manufacture		Per Cent of Increase*				
	Number of Establishments	Average Number	Per Cent Distribution	Amount	Per Cent Distribution	Amount	Per Cent Distribution	Value of Products		Value Added by Manufacture	
								1904-1909	1899-1904		
Marble and stone work.....	44	267	1.0	626,000	0.5	406,000	0.8	....	-10.1	2.8	-16.3
Ice, manufactured .....	30	251	0.9	570,000	0.4	444,000	0.9	51.6	84.3	45.6	76.3
Furniture and refrigerators.....	14	176	0.6	542,000	0.4	285,000	0.6	25.5	154.1	12.2	217.5
Pottery, terra-cotta and fire-clay products...	6	214	0.8	436,000	0.3	328,000	0.7	-44.6	37.1	-33.2	18.9
All other industries.....	445	11,848	42.2	70,816,000	54.5	22,352,000	45.1	15.1	5.6	24.2	36.3

\*Per cent of increase is based on figures in Table I, and a minus sign (—) denotes decrease.

It should be borne in mind, in considering this table, that the value of products in some of the industries involves a certain amount of duplication due to the use of the product of one establishment in the industry as material for another establishment.

In addition to the eighteen industries presented separately, there are seventeen industries each of which had a value of products in 1909 in excess of \$400,000. They are included under the head of "All Other Industries" in the table, because in some cases the operations of individual establishments would be disclosed if they were shown separately; in others, the returns do not properly present the true condition of the industry, for the reason that it is more or less interwoven with one or more industries of similar character, while for others comparable statistics for the different census years can not be presented without disclosing the operations of individual establishments or on account of changes in classification. These industries are: awnings, tents, and sails; beet sugar; cars, steam railroad, not including operations of railroad companies; cement; clothing, men's, including shirts; coffee and spice, roasting and grinding; coke; explosives; food preparations; iron and steel, blast furnaces; iron and steel, steel works and rolling mills; mineral and soda waters; petroleum, refining; smelting and refining, copper; smelting and refining, lead; smelting and refining, zinc; and sulphuric, nitric, and mixed acids. Statistics for petroleum refining, however, are presented in Table II for 1909.

The most important industries listed in the table given above, in which they are arranged in the order of the value of products, call for brief consideration.

*Slaughtering and Meat-Packing.*—This industry is the most important for which figures can be shown separately. It includes wholesale slaughtering and meat-packing establishments and those engaged in the manufacturing of sausage only. In 1904 it was fifth and in 1909 fourth in importance among the industries of the state when measured by value of products. In view of the fact that this industry showed a decrease of 23.5 per cent in value of products from 1899 to 1904, its growth from 1904 to 1909, 190.5 per cent, has been remarkable. In 1909 the industry gave employment to an average of 659 wage-earners, or 2.3 per cent of the total for all manufacturing industries, and the value of products, \$9,657,000, was 7.4 per cent of the total value of products for the state. The industry is largely confined to Denver and Pueblo.

*Flour-Mill and Grist-Mill Products.*—In 1909 there were seventy-seven establishments, an increase since 1904 of twenty-five, or 48.1 per cent, and an increase in value of products of \$2,085,000, or 36.1 per cent. From 1899 to 1904 the number of establishments increased three, or 6.1 per cent, and the value of products, \$1,342,000, or 30.2 per cent. Although these two periods



show great variation in percentage of increase in the number of establishments, the increases in value of products are nearly the same. As a rule, the mills are small and located in the rural districts. Because of the comparatively simple processes involved and the extent to which these processes are carried on by machinery, the value added by manufacture is not commensurate with the gross value of products or the number of establishments.

*Printing and Publishing.*—This classification includes book-binding and blank-book making; engraving, steel and copper plate; lithographing; printing and publishing, book and job or music; and the printing and publishing of newspapers and periodicals. In 1909 there were 439 establishments reported under the combined classification, with a value of products of \$6,962,000, most of which was reported from the cities of over 10,000 inhabitants. Among the industries shown separately in the table, printing and publishing, measured by value of products, was third in importance in 1909, second in 1904, and fourth in 1899. Exclusive of two small establishments, the statistics for which cannot be shown without divulging individual operations, the number of establishments increased twenty, or 4.8 per cent, and the value of products \$1,495,000, or 27.3 per cent, from 1904 to 1909.

*Cars and General Shop Construction and Repairs by Steam-Railroad Companies.*—In 1909 there were twenty-nine establishments reported, which gave employment to an average of 3,993 wage-earners, or 14.2 per cent of the total for the manufacturing establishments of the state, and the largest average number of wage-earners reported for any of the industries shown separately. Although there was a decrease of five, or 14.7 per cent, in the number of establishments from 1904 to 1909, there was an increase in the average number of wage-earners of 941, or 30.8 per cent, and of \$1,300,000, or 24.7 per cent, in the value of products. The development of railroad repair shops in Colorado is the result of the heavy upkeep of rolling-stock in mountainous sections and of the establishment of many terminals within the state. The statistics do not include minor repairs made in round-houses.

*Foundry and Machine-Shop Products.*—The fact that the number of establishments in this industry increased from eighty-four to 111 and the value of products from \$4,159,000 to \$5,907,000 during the decade, while the average number of wage-earners decreased from 1,875 to 1,813 during that time, indicates to some extent the perfection and growth of this industry in the state. The industry was really of greater importance in the state than is indicated by the statistics, as some machine shops manufactured a distinctive product and were assigned to other classifications.

*Lumber and Timber Products.*—Under this head are included statistics for logging and sawmill operations, for planing mills,

and for establishments engaged in the manufacture of wooden packing-boxes. The eastern part of the state is practically devoid of saw timber, so that the mills, which are generally small, are confined to the mountain districts. The number of establishments increased from 110 in 1904 to 263 in 1909, an increase of 153, or 139.1 per cent, and gave employment in 1909 to an average number of 2,190 wage-earners. The value of products increased \$1,688,000, or 67.6 per cent.

When measured by value added by manufacture, printing and publishing is of first importance among the industries listed in the table. Railroad repair shops and foundry and machine shops rank second and third, respectively, and are followed by the lumber and timber industry, the breweries, and the bakeries, in the order named. Slaughtering and meat-packing plants, and the flour- and grist-mills, which occupied first and second places in value of products, ranked below the foregoing industries with respect to value added by manufacture.

The table shows also the percentages of increase for these leading industries in respect to value of products and value added by manufacture. Slaughtering and meat-packing showed a greater rate of increase from 1904 to 1909 in value added by manufacture than any other of the specified industries; namely, 151.3 per cent. The same industry showed also the greatest increase for value of products, 190.5 per cent. The brick and tile, canning and preserving, butter, cheese, and condensed milk, and leather goods industries also showed remarkable increases both in gross value of products and in value added by manufacture.

Several industries show extensive fluctuations in respect to relative increases for the later five-year period, as compared with the earlier five years. None of the industries shown separately reports a decrease for both five-year periods. From 1904 to 1909 the manufacture of pottery, terra-cotta, and fire-clay products showed decreases in both value of products and value added by manufacture, this being the only industry showing a decrease in either item during this period. During the earlier five-year period, however, the slaughtering and meat-packing, marble and stone work, and foundry and machine-shop industries decreased in both items, the lumber and timber industry showed a decrease in value of products, and the malt-liquor industry a decrease in value added by manufacture during the five-year period 1899-1904.

#### PERSONS ENGAGED IN MANUFACTURING INDUSTRIES

The following table shows for 1909 the distribution of the number of persons engaged in manufactures, the average number of wage-earners being distributed by sex and age. It should be borne in mind, however, that the sex and age classification of the average number of wage earners in this and other tables is an estimate obtained by the method described in the Introduction.



CLASS	Persons		
	Engaged in Manufactures		
	Total	Male	Female
ALL CLASSES .....	34,115	31,381	2,734
Proprietors and officials.....	3,009	2,906	103
Proprietors and firm members.....	1,722	1,634	88
Salaried officers of corporations.....	422	413	9
Superintendents and managers.....	865	859	6
Clerks .....	3,039	2,518	521
Wage-earners (average number).....	28,067	25,782	2,285
16 years of age and over.....	27,915	25,646	2,269
Under 16 years of age.....	152	136	16

The average number of persons engaged in manufactures during 1909 was 34,115, of whom 28,067 were wage earners. Of the remainder, 3,009 were proprietors and officials, and 3,039 clerks. Corresponding figures for individual industries will be found in Table II.

The following table shows for 1909 the percentage of proprietors and officials, clerks, and wage-earners, respectively, among the total number of persons employed in manufactures. It covers all industries combined and ten important industries individually.

INDUSTRY	Persons Engaged in Manufactures			
	Per Cent of Total			
	Total	Proprie- tors and Officials	Clerks	Wage- earners (Average Number)
ALL INDUSTRIES .....	34,115	8.8	8.9	82.3
Bread and other bakery products.....	1,325	22.1	10.8	67.1
Brick and tile.....	1,036	9.0	2.0	89.0
Butter, cheese, and condensed milk.....	304	14.8	16.1	69.1
Cars and general shop construction and repairs by steam-railroad companies..	4,300	2.9	4.2	92.9
Flour-mill and grist-mill products.....	429	20.5	13.8	65.7
Foundry and machine-shop products.....	2,250	9.1	10.3	80.6
Liquors, malt .....	514	7.2	10.3	82.5
Lumber and timber products.....	2,614	13.1	3.1	83.8
Printing and publishing.....	3,747	15.8	21.1	63.1
Slaughtering and meat packing.....	834	3.5	17.5	79.0
All other industries.....	16,762	6.9	7.7	85.4



Of the total number of persons engaged in all manufacturing industries, 8.8 per cent were proprietors and officials, 8.9 per cent clerks, and 82.3 per cent wage-earners. In industries where the majority of the establishments are small and the work is to a large extent done by the proprietors or their immediate representatives, the proportion of persons engaged in the industries falling in the class of proprietors and officials is necessarily high. This condition is found in the bakeries, the flour and grist-mills, and in the printing and publishing establishments, for which the ratios of the proprietors and officials to the total number employed in the industries are 22.1 per cent, 20.5 per cent, and 15.8 per cent, respectively. Similar conditions prevail to some extent in the lumber and timber and the butter, cheese, and condensed-milk industries. The smallest proportion for this class, 2.9 per cent, is shown for railroad repair shops, and is due partly to the fact that the establishments in this industry are under corporate ownership, and so reported no proprietors; and partly to the fact that the highest officials of railroad companies, who exercise general supervision over them, are not, as a rule, assigned to this particular branch of the work.

The following table shows in percentages, for all industries combined, the distribution of the average number of wage-earners, by age periods and for those sixteen years of age and over by sex, calculated in the manner described in the Introduction. It also shows, for some of the important industries separately, a similar distribution of wage-earners as reported for December 15, or the nearest representative day. As a means of judging the importance of the several industries the average total number employed for the year is also given in each case.

INDUSTRY	Average Number	Per Cent of Total Wage-Earners		
		16 Years of Age and Over		Under 16 Years of Age
		Male	Female	
ALL INDUSTRIES .....	28,067	91.4	8.1	0.5
Bread and other bakery products.....	889	71.2	27.1	1.7
Brick and tile.....	922	98.4	0.1	1.5
Butter, cheese, and condensed milk.....	210	77.6	22.4	...
Cars and general shop construction and repairs by steam-railroad companies...	3,993	99.9	0.1	...
Flour-mill and grist-mill products.....	282	99.6	...	0.4
Foundry and machine-shop products.....	1,813	99.1	0.2	0.7
Liquors, malt .....	424	99.3	...	0.7
Lumber and timber products.....	2,190	98.9	1.0	0.1
Printing and publishing.....	2,366	81.6	16.0	2.4
Slaughtering and meat packing.....	659	95.9	2.1	2.0
All other industries.....	14,319	88.8	11.0	0.2

For method of estimating the distribution, by sex and age periods, of the average number in all industries combined, see Introduction.

For all industries combined, 91.4 per cent of the average number of wage-earners was males sixteen years of age and over; 8.1 per cent, females sixteen years of age and over; and five-tenths of 1 per cent, persons under the age of sixteen. In general, the table shows a very limited employment of women and children. The largest proportions of women employees were in the bakeries, creameries, and the printing and publishing establishments, and the largest proportions of children in the printing and publishing and the slaughtering and meat-packing establishments. Of the total of 2,269 female wage-earners in all industries combined, about one-tenth were employed in bakeries. Of the total number of wage-earners in all industries under sixteen years of age, over one-third were in printing and publishing establishments. With these two industries omitted, the females sixteen years of age and over in all industries combined would represent 5.9 per cent of the total number of wage-earners, and children under sixteen years of age, but three-tenths of 1 per cent.

In order to compare the distribution of persons engaged in manufactures in 1909 with that shown at the census of 1904, it is necessary to use the classification employed at the earlier

census. (See Introduction.) The following table makes this comparison according to occupational status:

CLASS	PERSONS ENGAGED IN MANUFACTURES					
	1909			1904		
	Number	Per Cent	Distribution	Number	Per Cent	Distribution
Total .....	34,115	100.0		25,888	100.0	
Proprietors and firm members....	1,722	5.0		1,398	5.4	
Salaried employes.....	4,326	12.7		2,677	10.3	
Wage-earners (average number)...	28,067	82.3		21,813	84.3	
						Per Cent of Increase, 1904-1909
						31.8
						23.2
						61.6
						28.7

Comparable figures are not obtainable for 1899. The table shows a much greater percentage of increase in the salaried employes than in the other two classes. There was, however, no very great change from 1904 to 1909 in the proportion of persons engaged in manufactures who were in each class.

The following table shows the average number of wage-earners, distributed according to age periods, and in the case of those sixteen years of age and over according to sex, for 1909, 1904, and 1899. The averages for 1909 are estimated on the basis of the actual number reported for a single representative day. (See Introduction.)

CLASS	AVERAGE NUMBER OF WAGE-EARNERS					
	1909			1904		1899
	Number	Per Cent	Distribution	Number	Per Cent	Distribution
Total .....	28,067	100.0		21,813	100.0	19,498
16 years of age and over.....	27,915	99.5		21,507	98.6	19,295
Male .....	25,646	91.4		20,164	92.4	18,214
Female .....	2,269	8.1		1,343	6.2	1,081
Under 16 years of age.....	152	0.5		306	1.4	203
						100.0
						99.0
						93.4
						5.5
						1.0

This table indicates that for all industries combined there has been a decrease during the ten years in the employment of



children under sixteen years of age, although from 1899 to 1904 the total number of children employed increased. The number of female wage-earners more than doubled between 1899 and 1909 and their proportion of the total number of wage-earners increased materially. In 1909 males sixteen years of age and over formed 91.4 per cent of all wage-earners, as compared with 92.4 per cent in 1904 and 93.4 per cent in 1899.

#### WAGE-EARNERS EMPLOYED BY MONTHS

The following table gives the number of wage-earners employed on the fifteenth of each month during the year 1909 for all industries combined, for the beet-sugar industry, and for all other industries combined; it gives also the percentage which the number reported for each month is of the greatest number reported for any month. In Table II is shown, for practically all of the important industries of the state, the largest number and also the smallest number of wage-earners reported for any month. The figures are for the fifteenth day, or the nearest representative day, of the month.

#### WAGE-EARNERS

MONTH	All Industries		Beet Sugar		All Other Industries	
	Number	Per Cent of Maximum	Number	Per Cent of Maximum	Number	Per Cent of Maximum
January .....	27,962	87.2	3,113	60.7	24,849	91.3
February .....	25,181	78.6	615	12.0	24,566	90.3
March .....	25,374	79.2	727	14.2	24,647	90.6
April .....	25,531	79.7	765	14.9	24,766	91.0
May .....	25,835	80.6	729	14.2	25,106	92.3
June .....	27,059	84.4	763	14.9	26,296	96.6
July .....	28,099	87.7	886	17.3	27,213	100.0
August .....	28,238	88.1	1,160	22.6	27,078	99.5
September .....	28,415	88.7	1,272	24.8	27,143	99.7
October .....	31,026	96.8	4,127	80.5	26,899	98.8
November .....	32,050	100.0	5,125	100.0	26,925	98.9
December .....	32,034	100.0	4,963	96.8	27,071	99.5

The beet-sugar industry is the only seasonal industry of importance in the state. The usual period during which the factories run continuously is from sixty to 100 days, during

which time the industry employs a sufficiently large number of wage-earners to affect considerably the total movement of employment in the state during the year. In this industry the smallest number, 615, was employed in February and the largest number, 5,125, in November. During each month from February through September the number employed represented only from 12 to 24.8 per cent of the number employed in November. Several other industries are slightly seasonal, but fluctuations in employment are not sufficient to greatly influence the steadiness of total employment for all industries. For all industries combined the number of wage-earners employed changed but little, there being a gradual increase from February until November, when the sugar factories were at the height of their production.

#### PREVAILING HOURS OF LABOR

In the following table wage-earners have been classified according to hours of labor prevailing in the establishments in which they are employed. In making this classification the average number of wage-earners employed during the year is used, and the number employed in each establishment is classified as a total according to the hours prevailing in that establishment, even though some few employes work a greater or less number of hours.

INDUSTRY	Average Number of Wage-Earners in Establishments Grouped According to Prevailing Hours of Work Per Week						
	Between		Between		Between		Over 72
	48 and under	48 and 54	54	54 and 60	60	60 and 72	
ALL INDUSTRIES .....	4,587	1,787	3,463	3,588	8,211	3,213	2,198
Bread and other bakery products.....	88	1	83	178	505	21	11
Brick and tile.....	328	...	30	40	524	...	...
Butter, cheese, and condensed milk.....	6	...	60	2	39	102	...
Canning and preserving.....	48	...	24	3	436	7	...
Cars and general shop construction and repairs by steam-railroad companies.....	...	682	263	100	726	2,222	...
Confectionery .....	15	...	19	144	160	9	2
Flour-mill and grist-mill products.....	11	...	10	16	172	71	2
Foundry and machine-shop products.....	171	353	909	8	349	23	...
Furniture and refrigerators.....	121	...	35	...	20	...	...
Ice, manufactured .....	4	...	6	68	2	2	140
Leather goods .....	22	4	165	20	58	...	...
Liquors, malt .....	259	...	47	59	59	...	...
Lumber and timber products.....	218	306	161	27	1,437	41	...
Marble and stone work.....	202	14	1	...	50	...	...
Pottery, terra-cotta, and fire-clay products.....	11	...	72	...	131	...	...
Printing and publishing.....	1,759	77	173	308	39	10	...
Slaughtering and meat-packing.....	...	...	287	...	372	...	...
Tobacco manufactures .....	400	...	3	...	24	...	...
All other industries.....	924	350	1,115	2,615	3,108	705	2,156
Total .....	28,067						1,020
...	889						2
...	922						...
...	210						1
...	518						...
...	3,993						...
...	349						2
...	282						...
...	1,813						...
...	176						...
...	251						...
...	209						...
...	424						...
...	2,190						...
...	267						...
...	214						...
...	2,366						...
...	659						...
...	427						...
...	11,848						875



It is evident from these figures that for more than one-half of the wage-earners employed in the manufacturing industries of Colorado the prevailing hours of labor range from fifty-four to sixty a week, or from nine to ten a day. Of the total number of wage-earners, 22.7 per cent are employed in establishments where the prevailing hours are less than nine a day and 22.9 per cent are employed in establishments where the prevailing hours are more than ten hours a day. It will be noticed that in the case of railroad repair shops, which report a larger number of employes than any of the other industries shown separately, most of the wage-earners work where the prevailing hours range from sixty to seventy-two a week. In the printing and publishing industry the greater number of wage-earners work forty-eight hours per week or less.

#### LOCATION OF ESTABLISHMENTS

The next table shows the extent to which the manufactures of Colorado are centralized in cities of 10,000 population or over. (See Introduction.) The statistics for 1904 are omitted from this table, because there was no census of population for that year, and it was impossible to determine the cities that came within the group having over 10,000 inhabitants.

In 1909, 44.2 per cent of the total value of products was reported from the cities having over 10,000 inhabitants and 55.6 per cent from the remainder of the state. In spite of the addition of Trinidad to this group of cities in 1909, and the marked growth of the establishments located in Denver, the change in the grouping of Cripple Creek and Leadville which fell from over 10,000 inhabitants in 1900 to less than 10,000 inhabitants in 1910, and from the city group to the districts outside during the decade, has caused the city group to be overtaken by the outside districts in respect to the relative importance of their manufacturing industries, as judged by number of establishments, value of products, or value added by manufacture. In number of wage-earners alone do the industries of the cities remain the most important; although the cities contain only 37.2 per cent of the population of the state, they employ 50.3 per cent of the wage-earners. Even in this respect, however, the importance of their industries has been declining, as in 1899 the percentage of wage-earners in cities having more than 10,000 inhabitants was 56.9 and in 1909, 54.7. That the manufacturing industries outside of these cities show a more rapid growth than do those of the cities is also due in part to the development of the beet-sugar industry, in which all the establishments reported are located outside of the cities in question, and in part to the growth of various industries in the mining districts.

ITEM	Year	Total	Location of Establishments		Per Cent. of Total	
			In cities		In cities	
			with		with	
			population	Outside	population	Outside
			of 10,000	districts	of 10,000	districts
			and over		and over	
Population .....	1910	799,024	297,058	501,966	37.2	62.8
	1900	539,700	205,703	333,997	38.1	61.9
Number of estab-	1909	2,034	949	1,085	46.7	53.3
lishments .....	1899	1,323	746	577	56.4	43.6
Average number	1909	28,067	14,114	13,953	50.3	49.7
of wage earners	1899	19,498	11,093	8,405	56.9	43.1
Value of products	1909	\$120,044,312	\$57,430,448	\$72,613,864	44.2	55.8
	1899	89,067,879	46,514,613	42,553,266	52.2	47.8
Value added by	1909	49,553,408	23,872,383	25,681,025	48.2	51.8
manufacture ...	1899	28,317,095	15,989,943	12,327,152	56.5	43.5

The four cities in Colorado having a population of 10,000 and over in 1910 were Denver, Pueblo, Colorado Springs, and Trinidad. Prior to 1910 Trinidad had less than 10,000 inhabitants, so was not included in the city group for 1900.

The following statement shows general statistics for 1909 and 1899 for Cripple Creek and Leadville, which had a population in 1900 in excess of 10,000, but which fell below this figure in 1910, and therefore were not included in the city group for the later year in the preceding table.

ITEM	Year	Cripple	
		Leadville	Creek
Population .....	1910	7,508	6,206
	1900	12,455	10,147
Number of establishments.....	1909	20	9
	1899	34	35
Average number of wage-earners.....	1909	650	40
	1899	1,227	167
Value of products.....	1909	\$4,477,746	\$117,723
	1899	5,882,949	440,659
Value added by manufacture.....	1909	1,065,526	74,267
	1899	1,042,783	265,491

The manufactures of both of the cities shown in this table are largely dependent upon the mining interests. In Cripple Creek each of the industries reported in 1904 and in 1909 shows

a decrease at the later census, and several industries, among which are foundry and machine-shop products, disappear altogether. During the decade 1899-1909 the total number of establishments decreased from thirty-five to nine, the average number of wage-earners from 167 to forty, the value of products from \$440,659 to \$117,723, and the value added by manufacture from \$265,491 to \$74,267. In Leadville the decreases in number of establishments, value of products, and average number of wage earners, although large, were less pronounced. During the decade 1899-1909 the number of establishments decreased from thirty-four to twenty, the average number of wage-earners from 1,227 to 650, the value of products from \$5,882,949 to \$4,477,746. The value added by manufacture, however, shows a slight increase, from \$1,042,783 to \$1,065,526. The smelting and refining of lead is the chief manufacturing industry in the city.

The population for 1910 and 1900 of the four cities which had 10,000 inhabitants or over in 1910, and of the two cities which had 10,000 or over in 1900, but less than 10,000 in 1910, is given in the following tabular statement:

CITY	Population	
	1910	1900
Denver .....	213,381	133,859
Pueblo .....	44,395	28,157
Colorado Springs .....	29,078	21,085
Trinidad .....	10,204	*5,345
Leadville .....	†7,508	12,455
Cripple Creek .....	†6,206	10,147

\*Population less than 10,000 in 1900, therefore, in the preceding table, the statistics for 1899 are included with those for the districts outside cities.

†Population less than 10,000 in 1910, therefore, in the preceding table, the statistics for 1909 are included with those for the districts outside cities.

The relative importance of each of the four cities having a population of 10,000 or over in 1910 is shown in the following table, in which the value of products and average number of wage-earners are shown separately for Denver, Pueblo, and Colorado Springs for 1909, 1904, and 1899, and for Trinidad for 1909:



CITY	Average Number of Wage-Earners			Value of Products		
	1909	1904	1899	1909	1904	1899
Denver .....	12,058	9,672	8,500	\$51,538,547	\$36,660,410	\$37,906,171
Pueblo .....	1,320	941	790	3,344,789	2,197,293	1,439,609
Colorado Springs	516	410	409	1,732,759	1,100,771	845,225
Trinidad .....	220	*	*	814,353	*	*

\*Population less than 10,000 in 1900.

Denver, Pueblo, and Colorado Springs all show increases in the average number of wage-earners and in the value of products both from 1899 to 1904 and from 1904 to 1909, except that the value of products manufactured in Denver decreased from 1899 to 1904. The increases were generally greater from 1904 to 1909 than during the earlier period.

Denver, the largest and most important city in the state, shows an increase in 1909, as compared with 1904, of \$14,878,137, or 40.6 per cent, in the value of products, and of 2,386, or 24.7 per cent, in the average number of wage-earners. Forty-three per cent of all wage-earners reported for the state were employed in this city.

The leading industries in Denver in 1909 were slaughtering and meat-packing, smelting and refining of lead and of copper, printing and publishing, foundries and machine shops, steam railroad repair shops, bakeries, breweries, and manufacture of butter, cheese, and condensed milk, and flour- and grist-mills, each of which had a value of products in excess of \$1,000,000. For many of the minor industries of the state, Denver reported all of the establishments.

The most important industries within the city limits of Pueblo are the railroad repair shops, and printing and publishing; those of Colorado Springs are printing and publishing, and butter-making; and those of Trinidad, breweries.

#### CHARACTER OF OWNERSHIP

The table that follows has for its purpose the presentation of conditions in respect to the character of ownership, or legal organization, of manufacturing enterprises. For all industries combined comparative figures are given covering the censuses of 1909 and 1904. Comparative data for 1899 are not available. Figures for 1909 only are presented for several important industries individually. In order to avoid disclosing the operations of individual concerns it is necessary to omit several important industries from this and the table following.

INDUSTRY AND CHARACTER OF OWNERSHIP	Num- ber of *Estab- lish- ments	Average Number of Wage- Earners	Value of Products	Value Added by Manu- facture
ALL INDUSTRIES—				
1909.....	2,034	28,067	\$130,044,312	\$49,553,408
1904.....	1,606	21,813	100,143,999	37,029,602
Individual—				
1909.....	987	2,539	8,104,923	4,499,519
1904.....	886	2,586	7,794,408	4,542,091
Firm—				
1909.....	333	1,355	4,772,280	2,828,216
1904.....	236	1,045	2,896,013	1,751,143
Corporation—				
1909.....	698	24,152	116,991,543	42,158,021
1904.....	478	18,169	89,377,091	30,677,368
Other—				
1909.....	16	21	175,566	67,652
1904.....	6	13	76,487	59,000
Per cent of total—				
1909.....	100.0	100.0	100.0	100.0
1904.....	100.0	100.0	100.0	100.0
Individual—				
1909.....	48.5	9.0	6.2	9.1
1904.....	55.2	11.9	7.8	12.3
Firm—				
1909.....	16.4	4.8	3.7	5.7
1904.....	14.7	4.8	2.9	4.7
Corporation—				
1909.....	34.3	86.1	90.0	85.1
1904.....	29.8	83.3	89.2	82.8
Other—				
1909.....	0.8	0.1	0.1	0.1
1904.....	0.4	0.1	0.1	0.2
Bread and other bakery products, 1909.	250	889	\$ 3,968,760	\$ 1,671,752

INDUSTRY AND CHARACTER OF OWNERSHIP	Num- ber of Estab- lish- ments	Average Number of Wage- Earners	Value of Products	Value Added by Manu- facture
Individual .....	188	313	1,521,651	680,734
Firm .....	40	61	355,002	148,756
Corporation .....	22	515	2,092,107	842,262
Per cent of total.....	100.0	100.0	100.0	100.0
Individual .....	75.2	35.2	38.3	40.7
Firm .....	16.0	6.9	8.9	8.9
Corporation .....	8.8	57.9	52.7	50.4
Brick and tile, 1909.....	69	922	\$ 1,670,042	\$ 1,158,639
Individual .....	26	126	177,726	142,586
Firm .....	10	57	70,470	56,279
Corporation .....	33	739	1,421,846	959,774
Per cent of total.....	100.0	100.0	100.0	100.0
Individual .....	37.7	13.7	10.6	12.3
Firm .....	14.5	6.2	4.2	4.9
Corporation .....	47.8	80.2	85.1	82.8
Butter, cheese, and condensed milk, 1909 .....	39	210	\$ 2,339,765	\$ 416,163
Individual .....	15	48	649,221	90,724
Firm .....	5	13	81,154	17,761
Corporation .....	10	138	1,514,069	292,191
Other .....	9	11	95,321	15,487
Per cent of total.....	100.0	100.0	100.0	100.0
Individual .....	38.5	22.9	27.7	21.8
Firm .....	12.8	6.2	3.5	4.3
Corporation .....	25.6	65.7	64.7	70.2
Other .....	23.1	5.2	4.1	3.7
Flour-mill and grist-mill products, 1909	77	282	\$ 7,867,706	\$ 1,195,392
Individual .....	15	12	303,675	53,129
Firm .....	14	15	357,286	85,114
Corporation .....	48	255	7,206,745	1,057,149



INDUSTRY AND CHARACTER OF OWNERSHIP	Num- ber of Estab- lish- ments	Average Number of Wage- Earners	Value of Products	Value Added by Manu- facture
Per cent of total.....	100.0	100.0	100.0	100.0
Individual .....	19.5	4.3	3.9	4.4
Firm .....	18.2	5.3	4.5	7.1
Corporation .....	62.3	90.4	91.6	88.4
Foundry and machine-shop products,				
1909 .....	111	1,813	\$ 5,906,595	\$ 3,102,635
Individual .....	38	173	641,931	300,777
Firm .....	17	111	303,695	176,551
Corporation .....	56	1,529	4,960,969	2,625,307
Per cent of total.....	100.0	100.0	100.0	100.0
Individual .....	34.2	9.5	10.9	9.7
Firm .....	15.3	6.1	5.1	5.7
Corporation .....	50.4	84.3	84.0	84.6
Lumber and timber products, 1909.....				
Individual .....	133	535	1,067,967	756,654
Firm .....	59	264	434,529	334,208
Corporation .....	71	1,391	2,682,368	1,698,043
Per cent of total.....	100.0	100.0	100.0	100.0
Individual .....	50.6	24.4	25.5	27.1
Firm .....	22.4	12.1	10.4	12.0
Corporation .....	27.0	63.5	64.1	60.9
Printing and publishing, 1909.....				
Individual .....	253	480	1,275,015	1,023,225
Firm .....	64	171	396,552	312,011
Corporation .....	116	1,715	5,244,351	3,774,970
Other .....	6	.....	45,803	45,403
Per cent of total.....	100.0	100.0	100.0	100.0
Individual .....	57.6	20.3	18.3	19.8
Firm .....	14.6	7.2	5.7	6.1
Corporation .....	26.4	72.5	75.3	73.2
Other .....	1.4	.....	.7	.9

The most important distinction shown is that between corporate and all other forms of ownership. In 1909, for all industries combined, 34.3 per cent of the total number of establishments were under corporate ownership, as against 65.7 per cent for all other forms. The corresponding figures for 1904 were 29.8 per cent and 70.3 per cent, respectively. In respect to value of products the corresponding proportions are reversed. In 1909 the establishments operated by corporations reported 90 per cent of the total value of products, as against 10 per cent for those under all other forms of ownership, while in 1904 the corresponding figures were 89.2 per cent and 10.8 per cent, respectively. Establishments under individual ownership decreased for all items in percentages of distribution, while those under firm ownership increased in percentages of distribution in number of establishments, value of products, and value added by manufacture.

SIZE OF ESTABLISHMENT

The tendency for manufacturing to become concentrated in large establishments, or the reverse, is a matter of interest from the standpoint of industrial organization. In order to throw some light upon it, the following table groups the establishments according to the value of their products. The table also shows the average size of establishments for all industries combined and for important industries separately, as measured by number of wage-earners, value of products, and value added by manufacture. The totals for all industries are shown for the last two censuses, while for certain important industries figures are given for 1909 only.

INDUSTRY AND VALUE OF PRODUCTS	Num- ber of    Average Estab-    Number		Value Added by Manu-	
	lish- ments	of Wage- Earners	Value of Products	facture
ALL INDUSTRIES—				
1909 .....	2,034	28,067	\$130,044,312	\$49,553,408
1904 .....	1,606	21,813	100,143,999	37,029,602
Les than \$5,000—				
1909 .....	760	731	1,862,931	1,257,050
1904 .....	627	644	1,629,067	1,137,197
\$5,000 and less than \$20,000—				
1909 .....	748	2,885	7,504,776	4,692,917
1904 .....	575	2,294	5,712,975	3,730,117
\$20,000 and less than \$100,000—				
1909 .....	351	4,632	14,497,582	7,938,415
1904 .....	272	3,970	11,250,852	6,322,999

INDUSTRY AND VALUE OF PRODUCTS	Num- ber of Estab- lish- ments	Average Number of Wage- Earners	Value of Products	Value Added by Manu- facture
\$100,000 and less than \$1,000,000—				
1909 .....	155	11,914	47,533,323	20,433,582
1904 .....	116	9,309	30,880,642	14,811,848
\$1,000,000 and over—				
1909 .....	20	7,905	58,645,700	15,231,444
1904 .....	16	5,596	50,670,463	11,027,441
Per cent of total—				
1909 .....	100.0	100.0	100.0	100.0
1904 .....	100.0	100.0	100.0	100.0
Less than \$5,000—				
1909 .....	37.4	2.6	1.4	2.5
1904 .....	39.0	3.0	1.6	3.1
\$5,000 and less than \$20,000—				
1909 .....	36.8	10.3	5.8	9.5
1904 .....	35.8	10.5	5.7	10.1
\$20,000 and less than \$100,000—				
1909 .....	17.3	16.5	11.1	16.0
1904 .....	16.9	18.2	11.2	17.1
\$100,000 and less than \$1,000,000—				
1909 .....	7.6	42.4	36.6	41.2
1904 .....	7.2	42.7	30.8	40.0
\$1,000,000 and over—				
1909 .....	1.0	28.2	45.1	30.7
1904 .....	1.0	25.7	50.6	29.8
Average per establishment—				
1909 .....	....	14	\$ 63,935	\$ 24,363
1904 .....	....	14	62,356	23,057
Bread and other bakery products, 1909.				
250	889	\$ 3,968,760	\$ 1,671,752	
Less than \$5,000.....	103	43	286,748	126,509
\$5,000 and less than \$20,000.....	117	233	1,115,805	505,074
\$20,000 and less than \$100,000.....	25	201	919,499	396,224
\$100,000 and less than \$1,000,000.....	5	412	1,646,708	643,945



INDUSTRY AND VALUE OF PRODUCTS	Num- ber of Estab- lish- ments	Average Number of Wage- Earners	Value of Products	Value Added by Manu- facture
Per cent of total.....	100.0	100.0	100.0	100.0
Less than \$5,000.....	41.2	4.8	7.2	7.6
\$5,000 and less than \$20,000.....	46.8	26.2	28.1	30.2
\$20,000 and less than \$100,000.....	10.0	22.6	23.2	23.7
\$100,000 and less than \$1,000,000.....	2.0	46.3	41.5	38.5
Average per establishment.....	....	4	\$ 15,875	\$ 6,687
Brick and tile, 1909.....	69	922	\$ 1,670,042	\$ 1,158,639
Less than \$5,000.....	20	50	61,229	49,556
\$5,000 and less than \$20,000.....	30	207	305,851	239,287
\$20,000 and less than \$100,000*.....	19	665	1,302,962	869,796
Per cent of total.....	100.0	100.0	100.0	100.0
Less than \$5,000.....	29.0	5.4	3.7	4.3
\$5,000 and less than \$20,000.....	43.5	22.5	18.3	20.7
\$20,000 and less than \$100,000.....	27.5	72.1	78.0	75.0
Average per establishment.....	....	13	\$ 24,204	\$ 16,792
Butter, cheese, and condensed milk, 1909 .....	39	210	\$ 2,339,765	\$ 416,163
Less than \$5,000.....	11	7	29,565	7,564
\$5,000 and less than \$20,000.....	13	20	143,860	30,151
\$20,000 and less than \$100,000.....	9	24	292,778	57,231
\$100,000 and less than \$1,000,000.....	6	159	1,873,562	321,217
Per cent of total.....	100.0	100.0	100.0	100.0
Less than \$5,000.....	28.2	3.4	1.3	4.2
\$5,000 and less than \$20,000.....	33.3	9.5	6.1	7.1
\$20,000 and less than \$100,000.....	23.1	11.4	12.5	13.4
\$100,000 and less than \$1,000,000.....	15.4	75.7	80.1	75.3
Average per establishment.....	....	5	\$ 59,994	\$ 10,671
Flour-mill and grist-mill products, 1909	77	282	\$ 7,867,706	\$ 1,195,392
Less than \$5,000.....	14	8	39,952	8,171
\$5,000 and less than \$20,000.....	21	18	239,572	46,368
\$20,000 and less than \$100,000.....	24	66	1,136,356	224,601
\$100,000 and less than \$1,000,000.....	18	190	6,451,826	916,252

INDUSTRY AND VALUE OF PRODUCTS	Num- ber of Estab- lish- ments	Average Number of Wage- Earners	Value of Products	Value Added by Manu- facture
Per cent of total.....	100.0	100.0	100.0	100.0
Less than \$5,000.....	18.2	2.8	0.5	0.7
\$5,000 and less than \$20,000.....	27.3	6.4	3.0	3.9
\$20,000 and less than \$100,000.....	31.1	23.4	14.5	18.8
\$100,000 and less than \$1,000,000.....	23.4	67.4	82.0	76.6
Average per establishment.....	....	4	\$ 102,178	\$ 15,525
Foundry and machine-shop products,				
1909 .....	111	1,813	\$ 5,906,595	\$ 3,102,635
Less than \$5,000.....	21	23	63,185	43,636
\$5,000 and less than \$20,000.....	37	146	351,719	236,204
\$20,000 and less than \$100,000.....	36	569	1,690,993	922,924
\$100,000 and less than \$1,000,000.....	17	1,075	3,800,698	1,899,871
Per cent of total.....	100.0	100.0	100.0	100.0
Less than \$5,000.....	18.9	1.3	1.1	1.4
\$5,000 and less than \$20,000.....	33.3	8.0	6.0	7.6
\$20,000 and less than \$100,000.....	32.4	31.4	28.6	29.7
\$100,000 and less than \$1,000,000.....	15.4	59.3	64.3	61.3
Average per establishment.....	....	16	\$ 53,213	\$ 27,952
Lumber and timber products, 1909.....				
Less than \$5,000.....	107	155	224,862	176,638
\$5,000 and less than \$20,000.....	111	669	1,219,195	850,591
\$20,000 and less than \$100,000.....	37	530	1,332,738	864,428
\$100,000 and less than \$1,000,000.....	8	836	1,408,069	897,248
Per cent of total.....	100.0	100.0	100.0	100.0
Less than \$5,000.....	40.7	7.1	5.4	6.3
\$5,000 and less than \$20,000.....	42.7	30.5	29.1	30.5
\$20,000 and less than \$100,000.....	14.1	24.2	31.8	31.0
\$100,000 and less than \$1,000,000.....	3.0	38.2	33.7	32.2
Average per establishment.....	....	8	\$ 15,912	\$ 10,604

INDUSTRY AND VALUE OF PRODUCTS	Num- ber of Average Estab- Number		Value of Products	Value Added by Manu- facture
	lish- ments	of Wage- Earners		
Printing and publishing, 1909.....	439	2,366	\$ 6,961,721	\$ 5,009,072
Less than \$5,000.....	242	245	607,125	490,769
\$5,000 and less than \$20,000.....	140	498	1,295,515	1,051,127
\$20,000 and less than \$100,000.....	44	541	1,664,825	1,155,791
\$100,000 and less than \$1,000,000.....	13	1,082	3,394,256	2,311,385
Per cent of total.....	100.0	100.0	100.0	100.0
Less than \$5,000.....	55.1	10.4	8.7	9.8
\$5,000 and less than \$20,000.....	31.9	21.0	18.6	21.0
\$20,000 and less than \$100,000.....	10.0	22.9	23.9	23.1
\$100,000 and less than \$1,000,000.....	3.0	45.7	48.8	46.1
Average per establishment.....	....	5	\$ 15,858	\$ 11,410

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\*Includes the group "\$100,000 and less than \$1,000,000."

This table shows that, in 1909, of the 2,034 establishments only twenty, or 1 per cent, had a value of product exceeding \$1,000,000. These twenty establishments, however, employed 7,905 wage-earners, or 28.2 per cent of the total for all establishments, and reported 45.1 per cent of the total value of products, and 30.7 per cent of the total value added by manufacture. The corresponding percentages for 1904 were 25.7, 50.6, and 29.8, respectively. It is interesting to note that this group, which showed increased percentages in average number of wage earners and value added by manufacture for 1909, as compared with 1904, showed a decrease in its percentage of the total value of products.

On the other hand, the very small establishments—that is, those having a value of products of less than \$5,000—constituted in 1909 a large proportion (37.4 per cent) of the total number of establishments, but the value of their products amounted to only 1.4 per cent of the total. There has been a decrease in the relative importance of this group since 1904. Approximately 82 per cent of the total value of products was reported from establishments having products valued at not less than \$100,000.

While the average number of wage-earners per establishment remained constant during the five-year period, the average value of products per establishment increased from \$62,356 in 1904 to \$63,935 in 1909, and the average value added by manufacture from \$23,057 to \$24,363. The increased values shown



may be, and probably are, due wholly or in part to the increase that has taken place in the prices of commodities. Of the industries shown separately only the flour and grist mills show an average value of products per establishment in excess of \$100,000.

In some respects, and especially from the standpoint of conditions under which persons engaged in manufactures work, the best classification of establishments to bring out the feature of size is a classification according to the number of wage-earners employed. The next table shows for 1909 such a classification for all industries combined and for ten important industries individually, and gives not only the number of establishments falling in each group but also the average number of wage-earners employed.

## ESTABLISHMENTS EMPLOYING—

INDUSTRY	Total	No Wage- Earners										501 to Over	
		Earners	Wage- Earners	6 to 20	21 to 50	51 to 100	100 to 250	251 to 500	501 to 1,000	Over 1,000	Wage- Earners	Wage- Earners	Wage- Earners
ALL INDUSTRIES .....	22,034	323	1,119	394	84	63	33	15	2	1			
Bread and other bakery products.....	250	67	161	16	2	2	2	.....	.....	.....			.....
Butter, cheese, and condensed milk.....	39	4	28	5	1	1	.....	.....	.....	.....			.....
Brick and tile.....	69	.....	34	26	7	1	1	.....	.....	.....			.....
Cars and general shop construction and repairs by steam-railroad companies	29	.....	5	5	5	3	5	5	1	.....			.....
Flour-mill and grist-mill products.....	77	12	50	15	.....	.....	.....	.....	.....	.....			.....
Foundry and machine-shop products...	111	6	48	33	12	10	2	.....	.....	.....			.....
Liquors, malt .....	11	.....	2	3	1	5	.....	.....	.....	.....			.....
Lumber and timber products.....	263	15	149	85	8	3	2	1	.....	.....			.....
Printing and publishing.....	439	118	246	57	9	5	4	.....	.....	.....			.....
Slaughtering and meat packing.....	13	2	3	3	1	2	1	1	.....	.....			.....
All other industries.....	733	99	393	146	38	31	16	8	1	1			1

(8)

## AVERAGE NUMBER OF WAGE-EARNERS

## ESTABLISHMENTS EMPLOYING—

INDUSTRY	Total	ESTABLISHMENTS EMPLOYING—							
		No Wage-Earners	1 to 5	6 to 20	21 to 50	51 to 100	100 to 250	251 to 500	501 to Over
ALL INDUSTRIES .....	28,067	.....	2,543	4,316	2,488	4,451	5,383	5,504	1,227 2,152
Bread and other bakery products.....	889	.....	308	148	66	160	207	.....	.....
Butter, cheese, and condensed milk....	210	.....	44	68	22	76	.....	.....	.....
Brick and tile.....	922	.....	108	302	214	62	236	.....	.....
Cars and general shop construction and repairs by steam-railroad companies 3,993		.....	12	66	165	234	848	2,001	667 .....
Flour-mill and grist-mill products.....	282	.....	101	181	.....	.....	.....	.....	.....
Foundry and machine-shop products... 1,813		.....	141	379	342	644	307	.....	.....
Liquors, malt .....	424	.....	3	45	47	329	.....	.....	.....
Lumber and timber products.....	2,190	.....	349	837	222	220	231	331	.....
Printing and publishing.....	2,366	.....	540	535	296	326	609	.....	.....
Slaughtering and meat packing.....	659	.....	10	40	23	120	184	282	.....
All other industries.....	14,319	.....	927	1,655	1,091	2,283	2,761	2,890	560 2,152



EXPENSES

As stated in the Introduction, the census does not purport to furnish figures that can be used for determining the cost of manufacture and profits. Facts of interest can, however, be brought out concerning the relative importance of the different classes of expenses which make up the total. The following table shows in percentages the distribution of expenses among the classes indicated for all industries combined and for certain important industries separately. The figures on which the percentages are based appear in Table II.

INDUSTRY	Per Cent of Total Expenses Reported			
	Salaries	Wages	Ma- terials	Miscel- laneous Expenses
ALL INDUSTRIES .....	4.9	17.4	70.2	7.5
Bread and other bakery products.....	4.8	16.6	68.2	10.4
Brick and tile.....	5.9	46.9	37.6	9.6
Butter, cheese, and condensed milk.....	3.0	5.8	85.9	5.3
Cars and general shop construction and re- pairs by steam-railroad companies.....	5.6	52.0	39.8	2.6
Flour-mill and grist-mill products.....	1.8	3.0	91.6	3.6
Foundry and machine-shop products.....	10.4	24.6	54.0	11.0
Liquors, malt .....	7.2	12.9	33.6	46.3
Lumber and timber products.....	4.9	41.9	40.3	12.9
Printing and publishing.....	18.5	30.6	30.3	20.6
Slaughtering and meat packing.....	2.3	4.2	89.7	3.8
All other products.....	3.9	14.4	76.2	5.5

This table shows that, for all industries combined, 70.2 per cent of the total expense was incurred for materials, 22.3 per cent for services—that is, salaries and wages—and but 7.5 per cent for other purposes. As would be expected, these proportions vary greatly in the different industries. The very large miscellaneous expense shown for the malt-liquor industry is due to the inclusion of internal-revenue taxes. The labor cost in the industries manufacturing food products is relatively low.

ENGINES AND POWER

The following table shows, for all industries combined, the number of engines or other motors, according to their character, employed in generating power (including electric motors operated by purchased current) and their total horse-power at the

censuses of 1909, 1904, and 1899. It also shows separately the number and horse-power of electric motors, including those operated by current generated in the manufacturing establishments.

The table indicates that the increase in owned primary power was in that generated by steam and gas engines and water motors, that generated by water wheels and the forms of owned power included under the head of "Other" showing decreases. During the five years 1904-1909 the number of steam engines increased from 873 to 1,207, and the number of gas engines from seventy-eight to 141, while the number of water wheels decreased from 108 to twenty-eight. In 1909, 87.7 per cent of the total primary power was generated by steam engines, a somewhat smaller proportion than is shown for either 1904 or 1899. As will be seen, the practice of renting power is increasing, 10.3 per cent of the total power reported being rented in 1909, as compared with 3.1 per cent and 3.5 per cent in 1904 and 1899, respectively. The use of electric motors for the purpose of applying the power generated within the establishments is also becoming more common, the horse-power of such motors increasing from 709 in 1899 to 11,965 in 1904 and 20,070 in 1909. The horse-power of electric motors run by rented power increased from 1,187 in 1899 to 3,765 in 1904 and 15,874 in 1909.

POWER	Number of Engines or Motors			Horse-power			Per Cent Distribution of Horse-power		
	1909	1904	1899 <sup>1</sup>	1909	1904	1899 <sup>1</sup>	1909	1904	1899
Primary power,									
total .....	3,293	1,059	864	154,615	124,907	43,434	100.0	100.0	100.0
Owued .....	1,387	1,059	864	138,640	121,071	41,895	89.7	96.9	96.5
Steam .....	1,207	873	783	135,645	117,539	39,400	87.7	94.1	90.7
Gas .....	141	78	81	1,464	317	519	0.9	0.3	1.2
Water wheels.	28	108	55	1,377	2,094	1,493	0.9	1.7	3.4
Water motors	11	.....	( <sup>2</sup> )	49	.....	( <sup>2</sup> )	( <sup>3</sup> )	.....	.....
Other .....	...	.....	...	105	1,121	483	0.1	0.9	1.1
Rented .....	1,906	( <sup>2</sup> )	( <sup>2</sup> )	15,975	3,836	1,539	10.3	3.1	3.5
Electric .....	1,906	( <sup>2</sup> )	( <sup>2</sup> )	15,874	3,765	1,187	10.3	3.0	2.7
Other .....	..	.....	...	101	71	352	0.1	0.1	0.8
Electric motors.	2,981	550	40	35,944	15,730	1,896	100.0	100.0	100.0
Run by cur-									
rent gen-									
erated by es-									
tablishment.	1,075	550	40	20,070	11,965	709	55.8	76.1	37.4
Run by rented									
power .....	1,906	( <sup>2</sup> )	( <sup>2</sup> )	15,874	3,765	1,187	44.2	23.9	62.6

<sup>1</sup> Includes the neighborhood industries and hand trades, omitted in 1904 and 1909.

<sup>2</sup> Not reported.

<sup>3</sup> Less than one-tenth of 1 per cent.

#### FUEL

Closely related to the question of kind of power employed is that of the fuel used in generating this power or otherwise as material in the manufacturing processes. The table following shows the quantity of each kind of fuel used in 1909, by totals, for all industries and for certain selected industries.



INDUSTRY	Anthra-		Coke	Wood	Oil, Including	
	cite Coal (Tons)	Bitumi- nous Coal (Tons)			Gasoline (Bar- rels)	Gas (1,000 Feet)
ALL INDUSTRIES .....	9,616	3,325,135	691,837	10,103	91,275	342,577
Beet sugar .....	...	230,221	9,300	.....	30	.....
Brick and tile.....	2,732	110,420	195	1,682	1	.....
Cars and general shop construc- tion and repairs by steam- railroad companies .....	77	147,291	446	3	1,184	2,033
Cement .....	...	123,765	.....	.....	.....	.....
Foundry and machine-shop products .....	16	15,026	11,724	660	774	1,674
Gas, illuminating and heating... ..	...	99,516	223	.....	29,136	.....
Iron and steel, blast furnaces.. ..	...	35,263	529,493	.....	.....	.....
Iron and steel, steel works and rolling-mills .....	...	308,968	26,007	4,539	23,341	314,313
Petroleum refining .....	...	17,383	.....	.....	33,350	.....
Smelting and refining, lead..... ..	...	162,152	109,020	96	.....	.....
All other industries.....	6,791	2,075,130	5,429	3,123	3,459	24,557

NOTE.—In addition there were 334 tons of other varieties of fuel reported.

### SUPPLEMENTARY DATA REGARDING IMPORTANT INDUSTRIES (With Statistics for Laundries.)

For certain industries the Census Bureau collects, by means of special schedules, details regarding the quantity and value of materials and products which do not appear on the general schedule. Certain data of this character for four important industries in Colorado are here presented.

#### SLAUGHTERING AND MEAT-PACKING

The following table includes for 1909 two establishments making sausage, while for previous years none was reported; it also shows by kind the quantities and values of products for the last three census years.

PRODUCT	1909	1904	1899
TOTAL VALUE .....	\$ 9,656,810	\$ 3,323,503	\$ 4,343,983
Beef, fresh—			
Pounds .....	33,521,352	15,589,690	20,789,680
Value .....	\$ 2,548,947	\$ 1,091,076	\$ 1,501,233
Veal, fresh—			
Pounds .....	1,369,852	498,089	417,000
Value .....	\$ 128,314	\$ 41,583	\$ 39,940
Mutton, fresh—			
Pounds .....	2,405,106	2,790,676	3,138,745
Value .....	\$ 237,668	\$ 256,377	\$ 270,729
Pork, fresh—			
Pounds .....	12,191,600	3,337,911	10,454,600
Value .....	\$ 1,198,459	\$ 313,799	\$ 663,687
Pork, salted or cured—			
Pounds .....	20,530,615	11,087,849	17,377,000
Value .....	\$ 2,648,836	\$ 982,129	\$ 1,044,050
Sausage, fresh or cured—			
Pounds .....	13,441,273	1,506,525	2,535,400
Value .....	\$ 289,058	\$ 117,444	\$ 153,866
Lard—			
Pounds .....	12,633,806	2,613,183	7,678,000
Value .....	\$ 1,418,794	\$ 181,197	\$ 417,960
Fertilizers and fertilizer materials—			
Tons .....	2,024	707	190
Value .....	\$ 54,413	\$ 8,303	\$ 2,030
Hides—			
Number .....	67,946	30,807	38,284
Pounds .....	4,071,771	1,784,820	2,128,330
Value .....	\$ 480,589	\$ 153,521	\$ 162,397
Pelts—			
Number .....	55,085	63,822	( <sup>2</sup> )
Value .....	\$ 54,505	\$ 52,871	.....
All other products.....	\$ 597,227	\$ 125,203	\$ 88,091

<sup>1</sup> Partly estimated.<sup>2</sup> Figures not available.

In general, the industry shows a remarkable increase in value of products from 1904 to 1909. The increases in the quantities and values of beef and pork products are very large without

exception, but mutton and the by-product pelts show small decreases. During the five years the production of fresh beef, veal, sausage, and hides more than doubled, that of fresh pork increased nearly twofold, and that of lard nearly fivefold. The output of fertilizers and the value of "all other products," which includes the amount received for custom and contract work and for a number of by-products, show marked increases.

#### FLOUR-MILL AND GRIST-MILL PRODUCTS

Colorado is not an important corn-growing state, but the development of dry-farming has in general brought about an increase in the production of wheat, oats, and barley. The following table gives the quantities and values of the different flour- and grist-mill products reported for the census years 1909 and 1904:

PRODUCT	QUANTITY		VALUE	
	1909	1904	1909	1904
TOTAL VALUE.....	.....	.....	\$7,867,706	\$5,783,421
Wheat flour—				
White (bbls.).....	970,448	962,862	5,136,352	4,348,518
Graham (bbls.) .....	7,331	7,226	36,286	28,959
Corn meal and corn flour (bbls.).....	21,958	18,419	74,764	47,658
Rye flour (bbls.).....	1,726	2,246	7,176	7,657
Buckwheat flour (lbs.).....	.....	2,500	.....	75
Barley meal (lbs.).....	367,800	114,000	8,190	912
Hominy and grits (lbs.).....	.....	8,038	.....	286
Feed (tons) .....	54,350	25,411	1,567,745	539,460
Offal (tons) .....	41,770	44,349	978,663	776,310
All other .....	.....	.....	58,530	33,586

A comparison of quantities rather than values best indicates the growth of the industry. Wheat flour, of which 99.3 per cent is white flour, is by far the most important product of this industry. Only slight gains are shown, however, for the five years in the quantities of white and Graham flour produced. Corn meal and corn flour show a gain of 3,539 in the number of barrels produced since 1904. The amount of barley meal produced in 1909 was more than three times the amount produced in 1904. Feed shows an increase in tonnage of 113.9 per cent, the largest increase in quantity shown in the table. The by-product, offal, decreased in quantity, and rye flour, relatively unimportant, decreased in both quantity and value. In 1909, 649 pairs of rolls and twenty-six runs of stone were reported as the equipment of the mills of the state. In the same year two establishments manufactured barrels and two manufactured sacks.



## PRINTING AND PUBLISHING

The best index of the development of this industry is the growth in the number of publications and their aggregate circulation per issue. The following table gives these details by period of issue for the years 1909, 1904, and 1899:

PERIOD OF ISSUE	Number of Publications			Aggregate Circulation per Issue		
	1909	1904	1899	1909	1904	1899
TOTAL .....	382	381	265	1,133,364	1,092,697	521,213
Daily .....	53	42	42	335,147	209,185	<sup>1</sup> 157,016
Sunday .....	13	14	17	223,008	222,854	( <sup>1</sup> )
Semi-weekly .....	6	<sup>2</sup> 7	<sup>2</sup> 4	5,609	5,301	2,500
Weekly .....	278	274	179	338,092	294,242	285,425
Monthly .....	31	38	19	230,308	348,815	72,947
All other classes....	1	6	4	1,200	12,300	3,325

<sup>1</sup>Sunday issues included with dailies.

<sup>2</sup>Includes one tri-weekly.

As shown in the table, the aggregate circulation per issue more than doubled from 1899 to 1904, while the increase was slight from 1904 to 1909. This irregular development of the state's newspapers and periodicals as a whole is due almost entirely to the fluctuations in the circulation of the monthlies, which increased nearly fivefold from 1899 to 1904 and fell off decidedly during the succeeding five-year period. From 1904 to 1909 the dailies and weeklies increased in number and in circulation, while Sunday publications, semi-weeklies, monthlies, and all others decreased in number, and monthlies and all others in circulation.

There were published in the state, in 1909, four Italian weeklies and two semi-weeklies; three Spanish weeklies; two Spanish-English weeklies; one German, one Servian, one Slavonian, and one Swedish weekly; and one Japanese semi-weekly.

## LUMBER AND TIMBER PRODUCTS

The state has a very extensive and largely undeveloped timber area. The following statement shows the quantities of the principal products of the sawmills of the state for 1909 and 1904:

PRODUCT	1909	1899 <sup>1</sup>
Rough lumber (M feet, b. m.).....	141,710	133,746
Shingles (thousands) .....	657	5,165
Lath (thousands) .....	11,494	5,558

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<sup>1</sup>Does not include reports for establishments with a product of less than \$500.

## LAUNDRIES

Statistics for steam laundries are not included in the general tables, or in the totals for manufacturing industries. In 1909 there were ninety-nine such establishments in the State of Colorado, thirty-six of which were in Denver, five in Pueblo, four in Colorado Springs, and two in Trinidad. The following statement summarizes the statistics:

Number of establishments.....	99
Persons engaged in the industry.....	2,076
Proprietors and firm members.....	103
Salaried employes .....	140
Wage-earners (average number).....	1,833
Primary horse-power .....	1,895
Capital .....	\$1,270,656
Expenses .....	1,595,638
Services .....	1,055,461
Materials .....	290,314
Miscellaneous .....	249,863
Amount received for work done.....	1,980,693

Forty-five out of ninety-nine establishments were under individual ownership, and twenty-seven each under firm and corporate ownership. Three establishments had receipts for the year's business amounting to between \$100,000 and \$1,000,000, twenty-seven had receipts of between \$20,000 and \$100,000, and sixty-nine receipts of less than \$20,000 each.

The number of wage-earners employed each month and the per cent which this number represented of the greatest number employed in any month were as follows:

Wage-Earners			Wage-Earners		
Per			Per		
Cent of			Cent of		
Maxi-			Maxi-		
MONTH	Number	mum	MONTH	Number	mum
January .....	1,696	82.9	July .....	1,996	97.6
February .....	1,684	82.3	August .....	2,046	100.0
March .....	1,707	83.4	September .....	1,962	95.9
April .....	1,756	85.8	October .....	1,855	90.7
May .....	1,763	86.2	November .....	1,850	90.4
June .....	1,844	90.1	December .....	1,835	89.7

The different kinds of primary power, the number of engines, and the amount of horse-power used in 1909 are shown in the following tabular statement:

KIND	Number	
	of Engines or Motors	Horse-Power
PRIMARY POWER, total.....		1,895
Owned .....		1,443
Steam .....	67	1,428
Water motors .....	1	15
Rented .....		452
Electric .....	42	272
Other .....		180

The kind and amount of fuel used are shown in the following statement:

KIND	Unit	Quantity
Coal—		
Anthracite .....	Tons	428
Bituminous .....	Tons	25,685
Wood .....	Cords	20
Oil .....	Barrels	65
Gas .....	1,000 feet	7,433
Other .....	Tons	4,800



## CUSTOM SAW- AND GRIST-MILLS

Statistics for custom saw- and grist-mills are not included in the general tables or in the totals for manufacturing industries and can not be separately presented here without divulging individual operations.

TABLE I—COMPARATIVE SUMMARY FOR 1909, 1904, AND 1899  
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES

INDUSTRY	Persons Engaged in Industry												
	Census	Number of Establish-ments	Pro-prie-tors and Firm Mem-bers				Wage-earners (Average)	Expressed in Thousands					
			Total	Mem-bers	Salaried Em-plies	Primary Num-ber)		Power	Capital Salaries	Wages	Cost of Mate-rials	Value Manu-fac-ture	
STATE—ALL INDUSTRIES .....	1909	2,034	34,115	1,722	4,326	28,067	154,615	\$162,668	\$5,648	\$19,912	\$80,491	\$130,044	\$49,553
	1904	1,606	25,888	1,398	2,677	21,813	124,907	107,664	3,549	15,100	63,114	100,144	37,030
	1899	1,323	.....	.....	1,870	19,498	43,434	58,173	2,059	11,708	60,751	89,068	28,317
Bread and other bakery products....	1909	250	1,325	272	164	889	613	1,676	163	559	2,297	3,969	1,672
	1904	186	934	200	64	670	231	943	77	411	1,487	2,657	1,170
	1899	132	621	135	66	420	.....	552	48	236	865	1,607	742
Brick and tile.....	1909	69	1,036	46	68	922	3,923	2,421	79	637	511	1,670	1,159
	1904	63	580	52	33	495	2,192	1,036	39	322	164	817	653
	1899	65	532	76	18	438	1,083	526	18	237	86	497	411

Butter, cheese, and condensed milk..	1909	39	304	26	68	210	657	1,221	68	130	1,924	2,340	416
	1904	120	141	16	28	97	476	593	31	58	1,081	1,290	209
	1899	38	133	35	18	80	403	204	11	40	471	618	147
Canning and preserving.....	1909	30	630	15	97	518	1,349	1,486	107	250	672	1,528	856
	1904	15	358	14	29	315	541	554	39	136	429	821	392
	1899	12	.....	.....	27	237	.....	312	29	76	250	406	156
Cars and general shop construction and repairs by steam-railroad com- panies .....	1909	29	4,300	.....	307	3,993	3,947	4,708	363	3,393	2,604	6,559	3,955
	1904	34	3,267	.....	215	3,052	2,422	1,646	253	2,265	2,663	5,259	2,596
	1899	29	2,824	.....	137	2,687	1,152	1,682	148	1,677	1,278	3,142	1,864
Confectionery .....	1909	35	483	32	102	349	145	580	92	136	531	1,023	492
	1904	19	296	11	43	239	99	341	44	105	294	685	391
	1899	10	.....	.....	70	153	.....	277	46	62	225	420	195
Flour-mill and grist-mill products....	1909	77	429	47	100	282	6,810	4,835	134	220	6,672	7,868	7,196
	1904	52	362	26	92	244	5,927	2,326	104	203	4,797	5,783	986
	1899	49	.....	.....	87	272	.....	1,977	76	167	3,769	4,441	672
Foundry and machine-shop products	1909	111	2,250	75	362	1,813	4,325	7,056	539	1,280	2,804	5,997	3,103
	1904	288	1,677	80	146	1,451	2,530	3,241	211	1,062	1,933	4,108	2,175
	1899	84	.....	.....	122	1,875	.....	2,909	153	1,162	1,720	4,159	2,439





Liquors, malt .....	1909	11	514	5	85	424	2,434	7,327	193	349	907	3,311	2,401
	1904	11	367	7	60	300	3,001	4,702	137	243	458	2,120	1,662
	1899	14	371	9	39	323	1,050	5,682	78	257	376	2,043	1,667
Lumber and timber products.....	1909	263	2,614	261	163	2,190	11,177	3,472	172	1,458	1,396	4,185	2,789
	1904	110	1,631	109	92	1,430	6,659	1,892	83	896	806	2,497	1,691
	1899	148	.....	.....	90	1,507	.....	1,605	80	799	1,099	2,638	1,539
Marble and stone work.....	1909	44	346	52	27	267	694	967	32	208	220	626	406
	1904	33	276	36	28	212	359	288	33	200	231	626	395
	1899	39	.....	.....	12	399	.....	410	14	279	224	696	472
Pottery, terra-cotta, and fire-clay products .....	1909	6	231	3	14	214	450	1,079	26	143	108	436	328
	1904	11	511	4	31	476	2,108	832	51	268	296	787	491
	1899	10	423	7	42	374	1,005	856	60	216	161	574	413
Printing and publishing.....	1909	439	3,747	406	975	2,366	2,045	4,941	1,104	1,823	1,806	6,962	5,156
	1904	349	2,916	399	615	1,902	1,531	3,604	701	1,343	1,311	5,467	4,156
	1899	286	.....	.....	372	1,896	.....	2,670	353	1,130	823	3,697	2,874
Slaughtering and meat packing.....	1909	13	834	5	170	659	2,450	3,653	210	389	8,295	9,657	1,362
	1904	11	303	4	52	247	888	1,107	55	175	2,782	3,324	542
	1899	14	316	7	48	261	.....	1,381	61	171	3,722	4,344	622





TABLE I—COMPARATIVE SUMMARY FOR 1909, 1904, AND 1899—Continued

CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES

INDUSTRY	Persons			Expressed in Thousands									
	Engaged in Industry												
	Number of	Pro- prie- tors and	Wage- Earners (Aver- age	Firm Salaried Men- bers	Em- ployes	Num- ber)	Primary Horse- Power	Capital	Salaries	Wages	Cost of	Value Manu- Mate- rials	Products
Census	Estab- lish- ments	Total	Members	Employes	Number)	Primary Horse- Power	Capital	Salaries	Wages	Cost of	Value Manu- Mate- rials	Products	Value Added by
DENVER—ALL INDUSTRIES .....	1909	766	15,037	586	2,393	12,058	25,165	\$17,534	\$3,019	\$8,405	\$30,927	\$51,539	\$20,612
	1904	722	11,752	596	1,484	9,672	.....	27,434	1,818	6,711	21,000	36,660	15,660
	1899	574	.....	.....	1,036	8,500	.....	31,271	1,181	5,236	24,472	37,906	13,434
Brass and bronze products.....	1909	5	51	5	4	42	52	45	5	36	75	145	70
	1904	14	35	2	1	32	.....	58	1	22	48	92	44
	1899	13	22	2	1	19	.....	30	2	12	38	65	27
Bread and other bakery products....	1909	91	797	86	117	594	487	1,177	134	339	1,515	2,546	1,031
	1904	75	566	72	52	442	.....	669	68	250	931	1,656	725
	1899	79	446	76	59	311	.....	405	44	163	596	1,132	536

TABLE I—COMPARATIVE SUMMARY FOR 1909, 1904, AND 1899—Continued

INDUSTRY	Persons													Value Added by Manu- fac- ture
	Engaged in Industry													
	Number of Estab- lish- ments	Total	Mem- bers	Firm Mem- bers	Salaried Em- ployes	Wage- Earners (Aver- age Num- ber)	Primary Horse- Power	Capital	Salaries	Wages	Cost of Mate- rials	Value of Products		
Brick and tile.....	1909	26	627	17	34	576	1,367	908	44	376	357	1,041	684	
	1904	29	345	31	11	303	.....	422	12	208	88	474	386	
	1899	20	237	22	7	208	.....	295	9	128	41	262	221	
Canning and preserving.....	1909	9	152	8	30	114	300	363	37	65	202	505	303	
	1904	18	128	10	15	103	.....	251	26	57	178	347	169	
	1899	15	.....	.....	9	31	.....	35	5	13	27	63	36	
Carriages and wagons and materials	1909	12	105	15	6	84	64	96	6	55	45	160	115	
	1904	125	152	27	4	121	.....	195	4	89	85	251	166	
	1899	214	99	18	4	77	.....	112	3	55	45	142	97	

Cars and general shop construction  
and repairs by steam-railroad  
companies .....

1909	5	1,845	.....	139	1,706	1,485	2,473	154	1,477	1,226	2,966	1,740
1904	5	1,368	.....	97	1,271	.....	621	112	954	956	2,072	1,116
1899	5	1,075	.....	69	1,006	.....	905	66	623	579	1,295	716

Confectionery .....

1909	21	338	19	65	254	97	403	65	94	407	760	353
1904	14	230	10	36	184	.....	262	37	83	241	560	319
1899	6	.....	.....	49	96	.....	169	28	39	159	290	131

Foundry and machine-shop products

1909	67	1,573	38	267	1,268	3,040	5,234	403	875	2,300	4,598	2,298
1904	30	1,244	38	109	1,097	.....	2,373	170	802	1,551	3,275	1,724
1899	51	.....	.....	85	1,221	.....	1,971	117	759	1,134	2,534	1,400

Leather goods .....

1909	17	254	18	59	177	70	382	60	108	318	651	333
1904	16	165	15	29	121	.....	278	28	84	158	389	231
1899	19	.....	.....	19	95	.....	156	16	60	158	281	123

Liquors, malt .....

1909	4	261	.....	51	210	1,283	4,894	126	176	432	1,675	1,243
1904	3	191	.....	35	156	.....	3,159	95	121	238	1,226	988
1899	4	230	3	21	206	.....	4,954	50	168	225	1,440	1,215

Lumber and timber products.....

1909	22	578	17	46	515	1,509	821	48	354	577	1,177	600
1904	19	331	7	17	307	.....	321	20	229	255	603	348
1899	10	332	6	25	301	.....	649	31	222	378	734	356

TABLE I—COMPARATIVE SUMMARY FOR 1909, 1904, AND 1899—Concluded  
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES

INDUSTRY	Persons Engaged in Industry			Expressed in Thousands				Value Added by Manu- fac- ture				
	Number of Estab- lish- ments	Census	Total	Firm Mem- bers	Salaried Em- ployes	Wage- Earners (Aver- age Num- ber)	Primary Horse- Power		Capital Salaries Wages	Cost of Mate- rials	Value of Products	
Marble and stone work.....	26	1909	195	30	14	151	389	16	133	169	426	257
	30	1904	263	32	25	206	.....	31	191	214	589	375
	25	1899	.....	.....	6	282	.....	10	230	203	580	377
Printing and publishing.....	150	1909	2,354	111	707	1,536	1,036	845	1,215	1,350	4,833	3,483
	155	1904	1,818	125	440	1,253	.....	517	896	1,018	4,836	3,818
	124	1899	.....	.....	263	1,131	.....	262	733	537	2,459	1,922
Tobacco manufactures .....	51	1909	441	51	32	358	.....	59	246	265	792	527
	56	1904	435	56	19	360	.....	26	232	234	711	477
	241	1899	.....	.....	23	241	.....	20	164	160	485	325



TABLE II—DETAIL STATEMENT FOR THE STATE BY INDUSTRIES, 1960

TABLE 11.—DETAIL STATEMENT FOR THE STATE BY INDUSTRIES, 1900																															
INDUSTRY	Number of Establishments		Pro- pri- etors		Sala- ried Officers and Superin- tendents		Persons Engaged in Industry		Wage-Earners—										EXPENSES					Miscellaneous				Value Added by Manu- facture			
			Firm Men- bers	and Man- agers	Male	Average	Maximum	Minimum	Number Representative Day					Services		Materials		Taxes, Including													
									Non-st Representative Day																						
									Nov.	Dec.	15, or	16	Under 16	Primary	Capital	Total	Offici- als	Clerks	Earners	Rent of	Power	Other	Factory	Internal Revenue	Contract Work	Other	Value of Products				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
ALL INDUSTRIES	2,601	31,116	1,722	1,287	3,218	521	28,061	Nov. 32,069	Feb. 25,181	17	17	17	17	17	164,616	1	\$162,667,891	\$114,659,592	\$4,827,674	\$2,829,013	\$19,912,312	\$5,628,516	\$71,962,388	\$ 611,957	\$1,350,221	\$108,902	\$6,627,689	\$130,941,312	\$49,653,408		
Artificial stone . . . . .	35	112	31	8	6	68	May	95	Jan. 33	15	85	...	...	...	36	2	146,665	119,760	7,632	3,350	14,537	681	53,134	1,120	769	1,684	6,852	162,813	29,068		
Boxes, cigar . . . . .	3	26	1	...	1	...	21	June <sup>1</sup>	22	Feb. <sup>2</sup>	20	21	9	12	...	14	3	50,415	31,465	...	82	8,964	108	19,106	320	315	...	1,320	41,846	22,681	
Brass and bronze products . . . . .	5	51	5	2	2	...	42	Nov.	48	Mich.	35	43	41	...	2	...	4	15,267	123,391	2,800	2,111	36,116	1,493	70,185	3,699	440	...	2,186	146,052	70,944	
Bread and other bakery products . . . . .	250	1,325	272	21	86	58	880	Aug.	929	Jan.	810	899	649	214	14	1	619	1,076,433	3,368,683	48,165	113,870	559,172	72,320	2,224,688	71,819	11,924	131	2,241	3,968,760	1,671,732	
Brick and tile . . . . .	68	1,036	46	47	18	3	922	July	1,308	Jan.	513	1,313	1,194	1	18	...	3,923	6	2,420,670	1,368,835	63,656	16,165	637,250	291,161	217,242	2,125	13,904	...	114,963	1,670,012	1,158,639
Brooms . . . . .	6	57	6	2	2	...	17	Aug. <sup>1</sup>	49	Apr. <sup>2</sup>	46	48	14	1	...	32	7	70,113	99,510	1,800	1,820	26,308	1,294	65,978	1,267	513	...	1,186	118,758	67,086	
Brushes . . . . .	4	10	4	...	1	...	5	Nov. <sup>1</sup>	6	May <sup>2</sup>	5	6	5	1	...	11	8	14,595	15,961	...	750	3,670	289	9,109	...	90	...	476	19,160	2,371	
Butter, cheese, and condensed milk . . . . .	39	304	36	19	27	22	210	July	217	Jan. <sup>1</sup>	187	209	155	15	...	657	9	1,220,524	2,238,579	30,000	38,097	129,712	16,225	1,907,377	5,661	6,454	224	104,516	2,339,765	416,163	
Canning and preserving . . . . .	30	630	15	37	42	18	518	Aug.	1,161	Apr. <sup>2</sup>	457	1,311	426	867	5	6	1,319	1,186,225	1,219,169	63,835	13,385	250,211	10,978	652,449	11,277	6,561	...	112,233	1,827,779	885,352	
Carriages and wagons and materials . . . . .	21	158	25	6	3	...	124	July	112	Jan. <sup>1</sup>	108	108	108	...	...	125	11	160,264	196,293	6,000	2,016	87,201	3,935	81,616	7,165	1,713	166	6,392	260,226	174,845	
Cars and general shop construction and repairs by steam-railroad com- panies . . . . .	29	1,309	...	125	180	2	3,993	Dec.	4,373	July	3,573	4,239	1,237	2	...	3,947	12	1,107,532	6,629,442	218,000	146,279	3,393,112	159,147	2,473,923	100	62,324	5,911	101,110	6,658,920	3,954,850	
Cars and general shop construction and repairs by street-railroad com- panies . . . . .	6	234	...	5	4	...	225	July	246	Mich.	212	218	217	...	1	...	464	13	231,182	273,635	6,893	3,494	110,346	1,624	113,411	...	5,039	...	2,016	273,635	158,400
Confectionery . . . . .	35	183	32	21	47	34	349	Dec.	119	Feb.	310	423	163	251	...	145	14	579,526	894,850	29,782	62,438	135,701	10,001	521,182	31,871	3,910	...	97,255	1,021,073	391,910	
Copper, tin, and sheet-iron products . . . . .	21	137	23	7	2	1	164	Dec.	122	Jan.	82	122	130	...	2	...	44	15	201,965	249,941	8,933	2,988	88,720	1,563	131,623	6,711	818	791	8,511	283,673	160,687
Fancy articles, not elsewhere speci- fied . . . . .	3	16	3	...	...	3	10	Aug. <sup>1</sup>	11	Jan. <sup>2</sup>	7	10	3	7	...	...	16	35,690	15,365	...	3,056	4,319	116	5,348	930	35	...	1,550	24,001	18,537	
Flour-mill and grist-mill products . . . . .	77	429	47	41	68	1	284	Oct.	320	July	253	289	288	...	1	...	6,810	17	4,835,438	7,124,344	73,928	60,100	219,968	53,085	6,619,229	2,121	29,616	110	233,776	7,867,706	1,168,382
Foundry and machine-shop products . . . . .	111	2,250	76	131	201	30	1,813	Sept.	2,001	Jan.	1,672	1,818	1,802	3	13	...	4,323	18	7,056,056	5,195,417	311,314	194,465	1,280,148	147,637	2,656,323	40,917	37,356	14,296	449,963	5,996,886	3,162,625
Furniture and refrigerators . . . . .	44	221	7	12	23	6	176	Dec.	196	Jan.	159	195	189	3	3	...	258	19	493,564	196,969	17,316	27,511	146,891	3,571	233,288	14,415	2,563	903	30,582	542,122	284,283
Hand stamps and stencils and brands . . . . .	3	19	2	2	...	...	15	Dec. <sup>1</sup>	16	June <sup>2</sup>	15	15	11	...	1	...	6	19	15,775	30,188	3,300	...	12,750	236	10,110	2,329	...	975	28,096	28,099	
Ice, manufactured . . . . .	30	316	11	21	28	1	251	Aug.	416	Dec.	165	181	189	...	1	...	4,361	21	2,415,090	446,382	38,830	28,209	189,803	63,163	1,512	1,510	15,270	...	17,055	268,819	143,734
Jewelry . . . . .	11	98	13	3	4	5	73	Dec.	77	Feb.	70	79	74	3	2	...	33	22	114,476	207,572	4,400	11,100	72,295	1,399	81,687	13,271	1,142	...	10,215	278,807	115,796
Leather goods . . . . .	30	363	29	19	37	9	269	Nov.	296	Jan.	254	284	213	41	...	109	23	884,788	883,170	29,200	38,195	172,319	2,710	525,791	18,446	1,648	...	81,501	1,054,338	515,857	
Liquors, malt . . . . .	11	514	5	32	63	...	121	July	475	Jan.	384	123	426	...	3	...	2,431	21	7,326,513	2,689,694	103,652	89,350	348,926	64,335	812,365	1,500	489,119	...	758,977	3,310,715	2,169,775
Lumber and timber products . . . . .	263	2,614	261	81	77	5	2,190	Aug. <sup>1</sup>	2,577	Apr.	1,793	2,809	2,877	28	4	...	11,177	35	3,472,112	3,175,166	112,526	58,937	1,157,889	31,977	4,351,482	9,338	32,123	3,296	405,128	4,181,961	2,788,905
Marble and stone work . . . . .	41	216	52	15	11	1	267	June	297	Jan.	224	278	...	...	...	694	26	96,612	516,967	21,320	10,281	208,405	12,855	291,039	2,389	3,450	12,448	37,610	625,681	406,787	
Mattresses and spring beds . . . . .	6	111	1	11	9	2	113	Oct.	138	Feb.	71	121	82	39	3	...	274	27	176,157	337,770	14,480	7,633	44,839	4,916	237,812	16,410	1,117	...	16,433	299,371	156,613
Models and patterns, not including paper patterns . . . . .	1	15	5	...	...	...	10	Apr.	13	Nov. <sup>2</sup>	8	8	8	...	...	29	28	7,402	12,626	...	...	...	5,055	305	2,389	1,314	68	...	405	19,677	16,983
Patent medicines and compounds and druggists' preparations . . . . .	23	71	8	11	3	...	50	Mich.	59	Jan.	43	64	41	23	...	90	29	115,450	122,013	10,073	1,975	23,821	1,080	62,659	3,196	911	100	17,428	168,153	104,664	
Petroleum, refining . . . . .	4	89	7	9	...	...	73	Oct.	80	Feb. <sup>2</sup>	68	76	76	...	...	420	30	1,112,726	591,645	28,283	11,910	63,547	50,072	389,215	...	8,910	124	39,894	618,346	178,509	
Photo-engraving . . . . .	1	28	9	3	...	1	22	Dec.	24	Feb. <sup>2</sup>	20	21	23	1	...	49	31	25,039	41,030	2,850	650	23,201	2,161	6,813	2,294	97	...	2,875	60,110	11,206	
Pottery, terra-cotta and fire-clay products . . . . .	6	231	3	7	2	5	214	July	267	Jan.	151	228	222	4	2	...	450	22	1,076,694	330,267	15,545	10,660	112,741	38,941	68,370	96	1,347	48,717	423,422	327,561	
Printing and publishing . . . . .	139	3,747	406	184	625	166	2,368	Dec.	2,483	May	2,307	2,568	2,048	401	54	5	2,015	33	4,911,071	5,899,377	427,078	676,743									



All other industries .....	1909	260	5,466	171	822	4,473	13,986	27,329	1,017	2,856	21,689	29,264	7,575
	1904	243	4,481	171	594	3,716	.....	16,322	671	2,493	14,805	19,579	4,774
	1899	176	.....	.....	396	3,273	.....	19,657	518	1,867	20,192	26,144	5,952

## CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED

Colorado Springs .....	1909	59	694	40	138	516	907	\$ 2,023	\$ 144	\$ 413	\$ 823	\$ 1,733	\$ 910
	1904	49	547	45	92	410	.....	1,611	84	284	412	1,101	689
	1899	34	.....	.....	78	409	.....	1,127	50	225	365	845	480
Pueblo .....	1909	94	1,637	73	244	1,320	2,276	4,137	264	957	1,497	3,345	1,848
	1904	80	1,120	65	114	941	.....	2,040	129	601	941	2,197	1,256
	1899	69	.....	.....	70	790	.....	1,184	70	458	672	1,440	768
Trinidad .....	1909	30	279	20	39	220	851	869	37	170	310	814	504
	1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

<sup>1</sup>Does not include statistics for one establishment, to avoid disclosure of individual operations.

<sup>2</sup>Does not include statistics for two establishments, to avoid disclosure of individual operations.

<sup>3</sup>Does not include statistics for five establishments, to avoid disclosure of individual operations.

CHAPTER VIII

STATISTICS OF THE RAILROADS OF COLORADO FOR  
THE YEAR ENDING JUNE 30, 1912

ATCHISON, TOPEKA & SANTA FE RAILROAD

CLASS	No. Em- ployes	Total No. Days Worked	Total Yearly Compen- sation	Average Daily Compen- sation	Accidents	
					Killed	Injured
General officers .....	2	713	\$ 10,175.54	\$14.27	..	..
Other officers .....	13	4,790	25,429.20	5.31	..	..
General office clerks.....	65	22,165	67,438.74	3.04	..	..
Station agents .....	35	12,448	31,009.42	2.49	..	..
Other station men.....	175	56,153	105,907.71	1.89	..	..
Engine men .....	87	23,746	138,605.86	5.84	..	..
Firemen .....	96	23,735	86,133.27	3.63	..	..
Conductors .....	59	13,848	87,781.21	6.34	..	..
Other trainmen .....	170	43,204	156,055.31	3.61	..	..
Machinists .....	71	26,569	150,618.40	3.98	..	..
Carpenters .....	69	21,359	57,561.52	2.69	..	..
Other shopmen .....	428	148,050	375,275.18	2.53	..	..
Section foremen .....	84	25,471	55,077.21	2.16	..	..
Other trackmen .....	1,110	165,768	230,057.11	1.39	..	..
Switch and crossing men.	7	2,460	4,185.82	1.70	..	..
Telegraph operators .....	62	20,335	58,706.64	2.89	..	..
All other laborers.....	469	142,727	318,129.77	2.23	15	433
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Totals .....	3,002	753,541	\$1,913,147.91	\$ 3.88	15	433



## BEAVER, PENROSE &amp; NORTHERN RAILROAD

CLASS	No. Em- ployes	Total No. Days Worked	Total Yearly Compen- sation	Average Daily Compen- sation	Accidents	
					Killed	Injured
General officers .....	1	366	\$ 1,200.00	\$ 3.28	..	..
Station agents .....	..	284	760.00	2.68	..	..
Enginemen .....	1	366	1,560.00	4.26	..	..
Firemen .....	1	366	840.00	2.30	..	..
Conductors .....	1	326	1,340.00	4.11	..	..
Section foremen .....	1	366	780.00	2.13	..	..
Crossing and switchmen..	..	126	208.05	1.65	..	..
Totals .....	5	2,200	\$ 6,688.05	\$ 2.91 4-7	..	..

## CHICAGO, BURLINGTON &amp; QUINCY RAILROAD

CLASS	No. Em- ployes	Total No. Days Worked	Total Yearly Compen- sation	Average Daily Compen- sation	Accidents	
					Killed	Injured
General officers .....	2	730	\$ 4,980.00	\$ 6.82	..	..
General office clerks.....	7	2,191	8,199.50	3.74	..	..
Station agents .....	36	13,140	27,173.08	2.07	..	..
Other station men .....	103	32,239	73,926.54	2.29	..	..
Enginemen .....	73	20,440	104,223.40	5.10	..	..
Firemen .....	68	18,980	59,774.70	3.15	..	..
Conductors .....	48	13,505	57,669.70	4.27	..	..
Other trainmen .....	88	24,455	71,370.75	2.92	..	..
Machinists .....	15	4,695	18,183.88	3.87	..	..
Carpenters .....	42	13,146	33,090.78	2.52	..	..
Other shopmen .....	279	25,120	190,415.34	2.53	..	..
Section foremen .....	60	21,900	50,440.87	2.30	..	..
Other trackmen .....	570	153,683	238,054.10	1.55	..	..
Switchmen and watchmen	3	1,095	2,097.45	1.92	..	..
Telegraph operators .....	49	17,885	44,998.39	2.52	..	..
All other laborers.....	246	66,669	176,208.49	2.64	..	..
Totals .....	1,689	429,873	\$1,160,807.17	\$ 3.13 2-3	3	143

## CHICAGO, ROCK ISLAND &amp; PACIFIC RAILROAD

CLASS	No. Em- ployes	Total No. Days Worked	Total Yearly Compen- sation	Average Daily Compen- sation	Accidents	
					Killed	Injured
General officers .....	44	708	\$ 12,274.45	\$17.34	..	..
Other officers .....	98	3,599	33,079.61	9.29	..	..
General office clerks.....	1,543	24,994	58,891.17	2.36	..	..
Station agents .....	17	5,953	12,800.73	2.15	..	..
Other station men.....	8	3,191	4,117.41	1.29	..	..
Enginemen .....	37	18,138	86,086.37	4.75	..	..
Firemen .....	37	18,163	59,074.85	3.25	..	..
Conductors .....	24	11,157	54,197.31	4.86	..	..
Other trainmen .....	56	23,977	66,537.51	2.78	..	..
Machinists .....	2	1,357	5,982.98	4.41	..	..
Carpenters .....	6	5,266	13,082.97	2.48	..	..
Other shopmen .....	71	29,561	64,459.94	2.18	..	..
Section foremen .....	26	9,651	20,052.43	2.08	..	..
Other trackmen .....	60	26,986	34,917.02	1.29	..	..
Telegraph operators .....	28	10,942	21,909.72	2.00	..	..
All other employes.....	619	30,486	64,665.77	2.12	..	..
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Totals .....	2,676	224,089	\$ 612,130.14	\$ 4.05 3-16	13	71

## COLORADO SPRINGS &amp; CRIPPLE CREEK DISTRICT RAILROAD

		Total	Total	Average		
		No.	Yearly	Daily		
	No. Em-	Days	Compen-	Compen-	Accidents	
	ployes	Worked	sation	sation	Killed	Injured
General officers .....	8	984	\$ 4,916.68	\$ 5.00	..	..
Other officers .....	3	449	1,267.68	2.82	..	..
General office clerks.....	32	4,073	5,985.98	1.47	..	..
Station agents .....	6	654	1,777.38	2.72	..	..
Other station men .....	4	499	1,257.24	2.52	..	..
Enginemen .....	15	1,227	6,718.89	5.48	..	..
Firemen .....	16	1,182	4,476.23	3.79	..	..
Conductors .....	14	1,273	5,745.74	4.51	..	..
Other trainmen .....	21	2,219	7,737.99	3.49	..	..
Machinists .....	4	427	1,597.53	3.74	..	..
Carpenters .....	9	1,023	2,975.54	2.91	..	..
Other shopmen .....	14	1,427	3,788.13	2.65	..	..
Section foremen .....	14	1,730	3,630.54	2.09	..	..
Other trackmen .....	83	8,189	13,391.98	1.64	..	..
Crossing and switchmen..	3	297	449.50	1.68	..	..
Telegraph operators .....	12	1,510	3,180.23	2.11	..	..
All other laborers.....	37	4,565	10,355.58	2.27	..	..
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Totals .....	295	31,728	\$ 79,252.84	\$ 2.99 2-3	..	..

## COLORADO EASTERN RAILROAD

		Total	Total	Average		
		No.	Yearly	Daily		
	No. Em-	Days	Compen-	Compen-	Accidents	
CLASS	ployes	Worked	sation	sation	Killed	Injured
General officers .....	5	.....	\$ 1,500.00	....	..	..
General office clerks.....	1	.....	750.00	....	..	..
Enginemen .....	1	.....	865.60	\$ 3.30	..	..
Firemen .....	1	.....	576.40	2.20	..	..
Other trainmen .....	1	.....	835.00	2.00	..	..
Other shopmen .....	2	.....	279.50	....	..	..
Other trackmen .....	5	.....	1,651.97	1.75	..	..
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Totals .....	16	.....	\$ 6,458.47	\$ 2.31 1-4	..	..

## COLORADO MIDLAND RAILROAD

CLASS	No. Em- ployes	Total No.	Total Yearly	Average Daily	Accidents	
		Days Worked	Compen- sation	Compen- sation	Killed	Injured
General officers.....	12	4,635	\$ 40,683.12	\$ 8.77	..	..
Other officers.....	27	8,922	39,241.64	4.39	..	..
General office clerks.....	59	23,462	53,567.69	2.24	..	..
Station agents.....	25	8,668	24,171.93	2.79	..	..
Other station men.....	15	5,438	11,407.94	2.10	..	..
Enginemen .....	47	15,288	114,058.16	7.46	..	..
Firemen .....	47	16,037	78,313.22	4.88	..	..
Conductors .....	30	9,134	58,804.19	6.44	..	..
Other trainmen.....	53	15,891	75,915.81	4.78	..	..
Machinists .....	48	13,416	44,188.04	3.29	..	..
Carpenters .....	43	14,732	46,930.61	3.19	..	..
Other shopmen .....	210	60,403	170,247.03	2.82	..	..
Section foremen.....	46	16,972	36,164.80	2.13	..	..
Other trackmen.....	193	45,302	76,605.64	1.69	..	..
Crossing and watchmen...	9	2,828	5,510.29	1.95	..	..
Telegraphers .....	32	12,081	31,568.86	2.61	..	..
All other employes.....	52	15,828	31,403.97	1.98	..	..
Totals .....	948	289,037	\$ 939,782.94	\$ 3.732 $\frac{2}{3}$	4	103

## CRYSTAL RIVER RAILROAD

CLASS	No. Em- ployes	Total No.	Total Yearly	Average Daily	Accidents	
		Days Worked	Compen- sation	Compen- sation	Killed	Injured
General officers.....	9	2,817	\$ 342.00	\$12.00	..	..
General office clerks.....	16	4,992	1,458.00	....	..	..
Station agents.....	..	153	625.00	4.08	..	..
Enginemen .....	1	285	1,159.54	4.07	..	..
Firemen .....	1	267	724.50	2.71	..	..
Conductors .....	1	272	978.07	3.60	..	..
Other trainmen.....	1	255	672.32	2.64	..	..
Section foremen.....	1	374	918.75	2.46	..	..
Other trackmen.....	9	1,255	2,326.68	1.85	..	..
All other laborers.....	1	247	487.40	1.97	..	..
Totals .....	40	10,917	\$ 9,692.26	\$ 2.379	..	..



## COLORADO SOUTHEASTERN RAILROAD

CLASS	No. Em- ployes	Total No. Days Worked	Total Yearly Compensation	Average Daily Compensation	Accidents Killed Injured	
General officers.....	8	2,504	\$ 11,160.00	\$ 4.45	..	..
Other officers .....	1	313	2,700.00	8.62	..	..
General office clerks.....	4	1,252	5,261.61	4.20	..	..
Station agents.....	1	313	1,373.23	4.38	..	..
Other station men.....	2	626	1,904.52	3.04	..	..
Enginemen .....	2	622	3,672.54	5.90	..	..
Firemen .....	2	622	2,353.35	3.78	..	..
Conductors .....	2	622	3,601.56	5.79	..	..
Other trainmen.....	6	1,712	6,071.38	3.54	..	..
Machinists .....	1	318	1,447.76	4.55	..	..
Carpenters .....	1	24	82.85	3.45	..	..
Other shopmen.....	3	973	3,296.25	3.38	..	..
Section foremen.....	1	313	1,200.00	3.83	..	..
Other trackmen.....	10	2,426	3,842.43	1.58	..	..
Telegraph operators.....	1	290	885.21	3.05	..	..
Totals .....	45	12,930	\$ 48,852.69	\$ 4.23 $\frac{3}{4}$		

## COLORADO &amp; SOUTHERN RAILROAD

CLASS	No. Em- ployes	Total No. Days Worked	Total Yearly Compensation	Average Daily Compensation	Accidents Killed Injured	
General officers.....	9	3,280	\$ 61,499.82	\$5.99	..	..
Other officers.....	30	11,066	88,018.03	7.95	..	..
General office clerks.....	299	105,046	278,513.26	2.65	..	..
Station agents.....	84	26,870	67,179.10	2.50	..	..
Other station men.....	329	121,738	265,267.30	2.18	..	..
Enginemen .....	211	72,738	355,489.59	4.88	..	..
Firemen .....	240	72,140	226,829.58	3.14	..	..
Conductors .....	116	42,600	210,422.33	4.94	..	..
Other trainmen.....	332	130,983	459,800.68	3.51	..	..
Machinists .....	289	77,952	248,182.10	3.18	..	..
Carpenters .....	123	46,994	128,944.55	2.74	..	..
Other shopmen.....	457	150,068	390,707.94	2.60	..	..
Section foremen.....	191	71,361	151,178.46	2.12	..	..
Other trackmen.....	856	323,081	483,800.59	1.49	..	..
Switch and crossing men..	63	22,778	40,529.30	1.78	..	..
All other laborers.....	208	63,743	145,798.66	2.29	..	..
Totals .....	499	144,244	\$ 306,880.80	\$ 2.13	..	..

## COLORADO &amp; WYOMING RAILROAD

CLASS	No. Em- ployes	Total No. Days Worked	Total Yearly Compen- sation	Average Daily Compen- sation	Accidents	
					Killed	Injured
General officers.....	9	2,817	\$ 3,966.74	\$ 1.41	..	..
Other officers.....	7	2,295	14,700.00	6.41	..	..
General office clerks.....	16	4,992	18,795.56	3.77	..	..
Station agents.....	6	2,196	5,664.00	2.58	..	..
Other station men.....	9	3,119	6,686.89	2.14	..	..
Enginemen .....	22	5,671	25,419.23	4.48	..	..
Firemen .....	17	5,552	15,395.89	2.77	..	..
Conductors .....	5	1,531	7,349.76	4.80	..	..
Other trainmen.....	62	14,807	55,946.39	3.78	..	..
Machinists .....	15	3,889	13,587.38	3.49	..	..
Carpenters .....	15	3,393	9,734.44	2.87	..	..
Other shopmen.....	95	29,477	67,410.16	2.29	..	..
Section foremen.....	11	3,869	8,874.29	2.29	..	..
Other trackmen.....	128	29,123	50,110.74	1.72	..	..
Telegraphers .....	2	725	2,852.00	3.93	..	..
All other employes.....	17	5,679	19,019.03	3.35	..	..
Totals .....	436	117,635	\$ 295,592.50	\$ 3.25½	3	21

## DENVER, BOULDER &amp; WESTERN RAILROAD

CLASS	No. Em- ployes	Total No. Days Worked	Total Yearly Compen- sation	Average Daily Compen- sation	Accidents	
					Killed	Injured
General officers.....	3	1,098	\$ 9,000.00	\$ 8.20	..	..
Other officers.....	3	1,098	5,520.00	5.03	..	..
General office clerks.....	1	366	900.00	2.46	..	..
Station agents.....	3	976	1,840.65	1.89	..	..
Enginemen .....	4	653	2,751.42	4.21	..	..
Firemen .....	4	668	1,850.49	2.77	..	..
Conductors .....	4	631	2,267.20	3.59	..	..
Other trainmen.....	7	684	1,885.00	2.76	..	..
Machinists .....	1	282	1,124.80	3.99	..	..
Carpenters .....	..	185	350.45	1.90	..	..
Other shopmen.....	3	891	2,246.97	2.52	..	..

CLASS	No. Em- ployes	Total No. Days Worked	Total Yearly Compen- sation	Average Daily Compen- sation	Accidents	
					Killed	Injured
Section foremen.....	6	1,573	3,179.39	2.02	..	..
Other trackmen.....	11	2,203	3,521.60	1.60	..	..
Telegraph operators.....	2	652	1,227.02	1.88	..	..
All other laborers.....	5	718	1,499.45	2.09	..	..
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Totals .....	57	12,678	\$ 39,164.44	\$ 3.127	..	..

## DENVER, LARAMIE &amp; NORTHWESTERN RAILROAD

CLASS	No. Em- ployes	Total No. Days Worked	Total Yearly Compen- sation	Average Daily Compen- sation	Accidents	
					Killed	Injured
General officers.....	2	1,430	\$ 14,006.14	\$ 9.80	..	..
Other officers.....	3	2,029	7,267.47	3.58	..	..
General office clerks.....	9	4,420	9,530.60	2.16	..	..
Station agents.....	4	1,392	2,907.00	2.09	..	..
Other station men.....	2	664	1,372.36	2.06	..	..
Enginemen .....	4	1,119	4,719.04	4.22	..	..
Firemen .....	4	656	1,686.24	2.57	..	..
Conductors .....	3	1,105	3,869.78	3.50	..	..
Other trainmen.....	1	617	1,413.50	2.29	..	..
Machinists .....	7	1,757	5,524.88	3.14	..	..
Carpenters .....	0	184	472.69	2.57	..	..
Other shopmen.....	12	3,110	6,854.13	2.20	..	..
Section foremen.....	5	1,873	3,746.23	2.00	..	..
Other trackmen.....	16	3,860	6,431.39	1.66	..	..
Crossing and watchmen...	5	1,671	3,193.35	1.91	..	..
Telegraph operators.....	1	348	1,140.00	3.28	..	..
All other employes.....	1	1,583	7,069.32	4.47	..	..
Totals .....	79	27,818	\$ 81,204.12	\$ 3.20 2-3	..	..

## DENVER, NORTHWESTERN &amp; PACIFIC RAILROAD

CLASS	No. Em- ployes	Total No. Days Worked	Total Yearly Compen- sation	Average Daily Compen- sation	Accidents	
					Killed	Injured
General officers.....	5	1,651	\$ 22,160.50	\$13.42	..	..
Other officers.....	6	1,933	8,325.65	4.31	..	..
General office clerks.....	31	9,045	27,187.99	3.02	..	..
Station agents.....	12	3,634	9,856.52	2.71	..	..
Other station men.....	19	5,504	11,687.20	2.13	..	..
Enginemen .....	34	11,084	55,380.98	5.50	..	..
Firemen .....	34	10,216	39,263.96	3.84	..	..
Conductors .....	20	6,481	32,834.34	5.07	..	..
Other trainmen.....	36	11,104	42,170.32	3.80	..	..
Machinists .....	17	4,461	14,369.95	3.22	..	..
Carpenters .....	26	4,234	12,033.77	2.84	..	..
Other shopmen.....	98	26,126	63,899.49	2.45	..	..
Section foremen.....	31	8,195	18,826.65	2.30	..	..
Other trackmen.....	258	45,756	71,581.57	1.57	..	..
Crossing and watchmen...	4	1,045	1,744.50	1.67	..	..
Telegraph operators.....	14	3,430	10,128.89	2.95	..	..
All other employes.....	54	23,748	56,476.39	2.38	..	..
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Totals .....	699	177,647	\$ 497,923.77	\$ 3.71 2-3	..	..

## DENVER &amp; RIO GRANDE RAILROAD

CLASS	No. Em- ployes	Total No. Days Worked	Total Yearly Compen- sation	Average Daily Compen- sation	Accidents	
					Killed	Injured
General officers.....	20	7,300	\$ 138,573.50	\$18.98	..	..
Other officers.....	27	9,855	81,005.36	8.22	..	..
General office clerks.....	336	122,640	332,742.27	2.71	..	..
Station agents.....	117	42,705	120,559.10	2.82	..	..
Other station men.....	505	184,325	345,127.52	1.87	..	..
Enginemen .....	312	113,880	660,414.75	5.80	..	..
Firemen .....	319	116,435	423,364.33	3.64	..	..
Conductors .....	176	64,240	355,646.17	5.54	..	..



CLASS	No. Em- ployes	Total No. Days Worked	Total Yearly Compen- sation	Average Daily Compen- sation	Accidents	
					Killed	Injured
Other trainmen.....	533	194,545	762,639.87	3.92	..	..
Machinists .....	388	121,056	412,792.95	3.41	..	..
Carpenters .....	352	109,824	302,895.41	2.76	..	..
Other shopmen.....	1,380	430,560	1,171,366.37	2.72	..	..
Section foremen.....	261	95,265	193,464.89	2.03	..	..
Other trackmen.....	1,478	461,136	714,895.01	1.55	..	..
Crossing and watchmen...	36	13,140	20,602.52	1.57	..	..
Telegraph operators.....	131	47,815	147,041.98	3.08	..	..
All other employes.....	1,034	377,410	774,362.19	2.05	..	..
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Totals .....	7,405	2,512,131	\$6,957,494.19	\$ 4.27½	..	..

## RIO GRANDE SOUTHERN RAILROAD

CLASS	No. Em- ployes	Total No. Days Worked	Total Yearly Compen- sation	Average Daily Compen- sation	Accidents	
					Killed	Injured
General officers.....	13	2,380	\$ 12,799.80	\$ 5.38	..	..
Other officers.....	4	1,434	7,268.91	5.07	..	..
General office clerks.....	5	1,755	4,144.20	2.36	..	..
Station agents.....	8	2,933	7,289.78	2.49	..	..
Other station men.....	8	2,433	5,138.22	2.11	..	..
Enginemen .....	19	7,569	35,867.28	4.74	..	..
Firemen .....	19	7,614	21,693.97	2.85	..	..
Conductors .....	10	3,490	20,641.91	5.91	..	..
Other trainmen.....	16	5,894	23,147.56	3.93	..	..
Machinists .....	6	1,614	6,940.20	4.30	..	..
Carpenters .....	1	273	808.54	2.96	..	..
Other shopmen.....	33	11,245	26,601.24	2.37	..	..
Section foremen.....	27	8,947	18,717.58	2.09	..	..
Other trackmen.....	229	52,527	87,252.59	1.66	..	..
Telegraph operators.....	2	833	3,380.32	4.06	..	..
All other employes.....	40	14,205	41,239.07	2.90	..	..
Totals .....	440	125,146	\$ 322,931.17	\$ 3.45½	..	..

## FLORENCE &amp; CRIPPLE CREEK RAILROAD

CLASS	No. Em- ployes	Total No. Days Worked	Total Yearly Compen- sation	Average Daily Compen- sation	Accidents	
					Killed	Injured
General officers.....	8	2,455	\$ 21,719.36	\$ 8.85	..	..
Other officers.....	4	1,200	4,582.79	3.82	..	..
General office clerks.....	25	9,784	25,258.30	2.58	..	..
Station agents.....	7	1,892	5,522.53	2.91	..	..
Other station men.....	3	1,048	2,406.36	2.30	..	..
Enginemen .....	25	5,036	29,363.35	5.83	..	..
Firemen .....	28	4,962	19,392.06	3.93	..	..
Conductors .....	27	5,410	25,138.87	4.65	..	..
Other trainmen.....	48	8,870	34,127.24	3.85	..	..
Machinists .....	15	2,103	8,233.10	3.91	..	..
Carpenters .....	23	6,289	17,930.19	2.86	..	..
Other shopmen.....	44	8,124	21,632.64	2.66	..	..
Section foremen.....	23	5,827	13,098.32	2.25	..	..
Other trackmen.....	181	27,028	44,057.70	1.63	..	..
Crossing and watchmen....	12	1,236	12,694.72	2.18	..	..
Telegraph operators.....	15	4,871	13,892.90	2.85	..	..
All other employees.....	76	17,760	44,384.41	2.50	..	..
Totals .....	554	113,895	\$ 333,434.84	\$ 3.50 $\frac{1}{2}$	..	..

## GREAT WESTERN RAILWAY

CLASS	No. Em- ployes	Total No. Days Worked	Total Yearly Compen- sation	Average Daily Compen- sation	Accidents	
					Killed	Injured
General officers.....	2	732	\$ 10,000.00	\$13.66	..	..
Other officers.....	2	732	3,900.00	5.33	..	..
General office clerks.....	3	1,098	3,760.00	3.42	..	..
Station agents .....	6	2,237	5,150.32	2.30	..	..
Other station men.....	2	762	505.00	.66	..	..
Enginemen .....	2	970	2,543.97	2.62	..	..
Conductors .....	2	854	3,093.11	3.60	..	..
Other trainmen.....	4	2,017	5,057.85	2.51	..	..
Machinists .....	3	448	1,116.56	2.49	..	..
Carpenters .....	5	751	1,969.35	2.62	..	..
Other shopmen.....	9	1,092	2,344.69	2.15	..	..
Section foremen.....	6	2,103	4,485.00	2.13	..	..
Other trackmen.....	43	8,462	13,704.32	1.62	..	..
All other employees.....	3	235	548.64	2.33	..	..
Totals .....	95	23,728	\$ 63,271.08	\$ 3.43 2-3	..	..

## LARAMIE, HAHN'S PEAK &amp; PACIFIC RAILROAD

CLASS	No. Em- ployes	Total No. Days Worked	Total Yearly Compen- sation	Average Daily Compen- sation	Accidents	
					Killed	Injured
General officers.....	3	480	\$ 7,788.00	\$16.23	..	..
Other officers.....	..	....	.....	....	..	..
General office clerks.....	1	100	330.00	..	..	..
Station agents .....	6	1,380	2,764.90	3.33	..	..
Other station men.....	1	314	485.90	2.00	..	..
Enginemen .....	3	744	2,625.75	1.55	..	..
Firemen .....	4	930	2,213.00	3.53	..	..
Conductors .....	3	744	1,742.45	2.38	..	..
Other trainmen.....	2	633	1,313.95	2.34	..	..
Machinists .....	3	495	1,548.60	2.08	..	..
Carpenters .....	6	658	1,917.30	3.13	..	..
Other shopmen.....	5	1,306	3,542.85	2.91	..	..
Section foremen.....	8	1,574	3,295.40	2.71	..	..
Other trackmen.....	66	9,215	15,731.20	2.09	..	..
Totals .....	111	\$18,573	\$ 45,299.30	\$ 3.53 2-3	..	..

## MANITOU &amp; PIKE'S PEAK RAILROAD

CLASS	No. Em- ployes	Total No. Days Worked	Total Yearly Compen- sation	Average Daily Compen- sation	Accidents	
					Killed	Injured
General officers .....	2	732	\$ 11,000.00	\$15.03	..	..
General office clerks.....	1	366	2,400.00	6.56	..	..
Station agents .....	1	166	409.45	2.47	..	..
Other station men .....	1	152	269.35	1.77	..	..
Enginemen .....	2	630	3,147.50	5.00	..	..
Firemen .....	2	632	1,894.50	3.00	..	..
Conductors .....	2	427	1,425.60	3.34	..	..
Other trainmen .....	2	332	930.75	2.80	..	..
Machinists .....	1	366	1,900.00	5.19	..	..
Carpenters .....	1	236	1,129.90	4.79	..	..
Other shopmen .....	18	4,156	9,540.40	2.30	..	..
Section foremen .....	2	385	924.05	2.40	..	..
Other trackmen .....	19	3,540	6,349.15	1.79	..	..
All other employes.....	2	917	2,841.80	3.10	..	..
Totals .....	56	13,037	\$ 44,162.45	\$ 4.25 1-3	..	..

## MIDLAND TERMINAL RAILROAD

CLASS	No. Em- ployes	Total No. Days Worked	Total Yearly Compen- sation	Average Daily Compen- sation	Accidents	
					Killed	Injured
General officers .....	2	473	\$ 2,863.96	\$ 6.05	..	..
Other officers .....	1	220	684.88	3.11	..	..
General office clerks.....	6	1,941	3,424.47	1.77	..	..
Station agents .....	3	990	3,179.50	3.21	..	..
Other station men .....	6	1,506	3,979.80	2.64	..	..
Enginemen .....	9	1,306	7,634.63	5.85	..	..
Firemen .....	7	1,276	5,046.46	3.95	..	..
Conductors .....	5	1,234	6,126.23	4.96	..	..
Other trainmen .....	12	2,341	8,096.97	3.46	..	..
Machinists .....	1	260	992.45	3.82	..	..
Carpenters .....	2	711	2,105.04	2.96	..	..
Other shopmen .....	2	927	2,464.40	2.66	..	..
Section foremen .....	6	2,048	4,398.50	2.15	..	..
Other trackmen .....	37	7,104	11,754.63	1.65	..	..
Crossing and watchmen..	1	103	174.83	1.70	..	..
Telegraphers .....	3	925	2,110.50	2.28	..	..
All other employes.....	14	3,593	8,022.38	2.23 1-3	..	..
<hr/>						
Totals .....	117	26,958	\$ 73,060.13	\$ 3.20 1-3	..	..

## MISSOURI PACIFIC RAILROAD

CLASS	No. Em- ployes	Total No. Days Worked	Total Yearly Compen- sation	Average Daily Compen- sation	Accidents	
					Killed	Injured
General officers .....	81	1,054	\$ 12,956.54	\$12.29	..	..
Other officers .....	205	2,199	10,777.74	4.90	..	..
General office clerks.....	1,489	11,178	27,263.14	2.44	..	..
Station agents .....	11	3,994	10,181.00	2.55	..	..
Other station men.....	21	7,013	18,140.35	2.59	..	..
Enginemen .....	24	8,255	38,900.10	4.71	..	..
Firemen .....	26	7,911	26,163.20	3.31	..	..
Conductors .....	20	5,614	25,147.50	4.48	..	..
Other trainmen .....	75	16,346	51,520.36	3.15	..	..



CLASS	No. Em- ployes	Total No. Days Worked	Total Yearly Compen- sation	Average Daily Compen- sation	Accidents	
					Killed	Injured
Machinists .....	3	1,910	8,158.75	4.27	..	..
Carpenters .....	6	4,482	10,392.15	2.32	..	..
Other shopmen .....	92	23,404	55,465.10	2.37	..	..
Section foremen .....	52	10,885	21,254.40	1.95	..	..
Other trackmen .....	451	41,092	62,328.45	1.51	..	..
Crossing and watching....	2	653	1,185.95	1.82	..	..
Telegraph operators .....	38	4,679	12,798.95	2.74	..	..
All other employes.....	504	40,848	99,784.93	2.44	..	..
<hr/>						
Totals .....	3,100	191,517	\$ 492,418.51	\$ 3.52	1	35

## SAN LUIS &amp; SOUTHERN RAILROAD

CLASS	No. Em- ployes	Total No. Days Worked	Total Yearly Compen- sation	Average Daily Compen- sation	Accidents	
					Killed	Injured
General officers .....	5	1,647	\$ 2,634.96	\$ 1.60	..	..
Other officers .....	1	366	300.00	.82	..	..
General office clerks.....	8	2,549	2,561.29	1.00	..	..
Station agents .....	3	1,098	2,706.00	2.46	..	..
Enginemen .....	1	412	1,991.93	4.83	..	..
Firemen .....	1	412	1,249.03	3.03	..	..
Conductors .....	1	412	1,969.73	4.78	..	..
Other trainmen .....	1	412	1,363.53	3.31	..	..
Machinists .....	1	101	549.16	5.43	..	..
Carpenters .....	1	31	111.10	3.58	..	..
Other shopmen .....	2	744	1,988.34	2.67	..	..
Section foremen .....	1	366	720.00	1.97	..	..
Other trackmen .....	2	432	687.35	1.59	..	..
All other employes.....	1	320	921.21	2.88	..	..
<hr/>						
Totals .....	29	9,302	\$ 19,653.63	\$ 2.85 5-14	..	..

## BIENNIAL REPORT

## UINTAH RAILROAD

CLASS	No. Em- ployes	Total No. Days Worked	Total Yearly Compen- sation	Average Daily Compen- sation	Accidents	
					Killed	Injured
General officers .....	3	1,098	\$ 8,320.00	\$ 7.57	..	..
Other offices .....	2	732	5,400.00	7.38	..	..
General office clerks .....	3	1,098	3,320.00	3.02	..	..
Station agents .....	3	1,143	3,767.76	3.30	..	..
Other station men .....	25	9,116	18,990.46	2.08	..	..
Enginemen .....	5	1,925	9,627.50	5.00	..	..
Firemen .....	6	1,908	6,199.72	3.25	..	..
Conductors .....	5	1,780	7,512.68	4.22	..	..
Other trainmen .....	6	1,109	3,355.59	3.02	..	..
Machinists .....	3	1,086	4,780.00	4.40	..	..
Carpenters .....	10	3,566	12,460.49	3.49	..	..
Other shopmen .....	10	4,366	13,222.74	3.03	..	..
Section men, foremen ....	8	3,062	7,484.76	2.44	..	..
Other trackmen .....	38	19,027	35,908.93	1.89	..	..
Telegraph operators .....	2	732	1,980.00	2.70	..	..
All other employes .....	59	30,110	74,645.94	2.48	..	..
Totals .....	288	81,858	\$ 216,976.57	3.70½	..	..

## UNION PACIFIC RAILROAD

CLASS	No. Em- ployes	Total No. Days Worked	Total Yearly Compen- sation	Average Daily Compen- sation	Accidents	
					Killed	Injured
General officers .....	16	5,689	\$ 38,989.16	6.85	..	..
General office clerks .....	45	18,442	45,916.49	2.49	..	..
Station agents .....	49	15,613	32,571.59	2.09	..	..
Other station men .....	140	52,180	102,171.62	1.96	..	..
Enginemen .....	91	.....	193,919.51	....	..	..
Firemen .....	88	.....	119,087.96	....	..	..
Conductors .....	57	.....	118,623.74	....	..	..
Other trainmen .....	161	.....	218,502.69	....	..	..
Machinists .....	63	.....	80,352.60	....	..	..
Carpenters .....	64	.....	36,650.06	....	..	..
Other shopmen .....	331	.....	288,573.52	....	..	..

CLASS	No. Em- ployes	Total No. Days Worked	Total Yearly Compensation	Average Daily Compensation	Accidents	
					Killed	Injured
Section foremen .....	85	30,522	68,060.65	2.23	..	..
Other trackmen .....	503	150,332	225,193.25	1.50	..	..
Crossing and watchmen..	21	8,377	14,066.45	1.68	..	..
Telegraph operators.....	72	28,403	71,856.16	2.53	..	..
All other employes .....	466	185,749	402,637.08	2.17	..	..
<hr/>		<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
Totals .....	2,252	495,307	\$2,057,172.53	2.61	15	57

## DENVER UNION DEPOT &amp; RAILROAD COMPANY

CLASS	No. Em- ployes	Total No. Days Worked	Total Yearly Compensation	Average Daily Compensation	Accidents	
					Killed	Injured
General officers .....	2	732	\$ 3,100.00	4.37	..	..
Other officers .....	2	732	3,600.00	4.92	..	..
General office clerks .....	2	732	2,000.00	2.73	..	..
Other station men.....	127	46,482	99,641.65	2.17	..	..
Other trackmen .....	8	2,928	4,783.30	1.63	..	..
Crossing and watchmen...	12	4,392	10,383.60	2.36	..	..
Totals .....	153	55,998	\$ 123,508.55	3.03	..	..

## PUEBLO UNION DEPOT RAILROAD COMPANY

CLASS	No. Em- ployes	Total No. Days Worked	Total Yearly Compen- sation	Average Daily Compen- sation	Accidents	
					Killed	Injured
General officers .....	5	300	\$ 800.00	2.666	..	..
Other officers .....	1	360	2,400.00	6.666	..	..
Other station men .....	39	12,720	30,620.00	2.407	..	..
Carpenters .....	1	360	870.00	2.416	..	..
Section men .....	1	360	720.00	2.00	..	..
Other trackmen .....	1	360	600.00	1.666	..	..
Crossing and watchmen..	4	1,440	3,312.00	2.30	..	..
All other employes .....	30	11,100	13,723.11	1.236	..	..
Totals .....	82	27,000	14,116.33	2.669	..	..

## RECAPITULATION

Total No. Employes	Average No. Days Worked	Average Yearly Compensation	Average Daily Compensation	Total Accidents	
				Killed	Injured
24,669 499 -----	222,482 -----	\$ 300.05	\$3.31½	93	1,224
25,168	Per man, 90 days				



## CHAPTER IX

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### MINING STATISTICS AND MISCELLANEOUS

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#### COAL PRODUCTION, 1911-1912

(From Report of James Dalrymple, State Inspector of Coal Mines.)

The coal industry of Colorado for the two years just passed, as compared with that of 1909-1910, shows a decrease in production of 1,692,520 tons. The principal reason for this decrease was the abnormal demand for Colorado coal in 1910, during labor troubles in some of the other coal-producing states, and the adverse financial conditions in 1911. The production in 1911 was 10,127,595 short tons; in 1912 it was 11,016,948 short tons; making a total production for the biennial period of 21,214,543 short tons.

Our means of producing has grown much more rapidly than the demand. I do not anticipate any material increase in the production in the near future, unless new manufacturing industries start up, either in Colorado or some of the states adjoining us on the east.

#### NUMBER EMPLOYED

In 1911 there were 14,315.2 people employed in and around the coal mines; in 1912 there were 13,980.6.

#### NEW MINES AND OLD MINES OPENED

During the biennial period ten new mines were opened and sixteen old mines reopened, and considerable improvements were made in some of the older mines.

#### MINES CLOSED OR ABANDONED

In the two years nineteen mines were abandoned.

#### FATALITIES

In 1911 ninety-one (91) lives were lost, and two deaths occurred from natural causes. Three hundred and five (305) people were injured. One mine disaster occurred—the dust explosion at the Cokedale mine, where seventeen (17) men lost their lives.

In 1912 ninety-eight (98) lives were lost and three hundred and fifty-six (356) persons were injured. One mine disaster

occurred—the gas explosion at the Hastings mine, where twelve (12) men met their death.

#### AVOIDABLE ACCIDENTS

On January 1, 1913, I requested the deputy inspectors, while investigating fatal accidents, to form an opinion, based upon their own observations, as to whether or not the accidents were avoidable. In going over the reports of fatalities made by the deputies and myself, our opinion is that over 50 per cent of all the fatal accidents were avoidable. This is especially so with the accidents from falls of rock and coal.

In the majority of accidents the deceased or injured person is held responsible, because of neglect on his part. I do not agree with this, because I believe incompetence, and not negligence, is the cause, and the person who is so incompetent that he knows practically nothing about the business in which he is engaged, and is unable to understand what is being said to him by those in charge, should not be held responsible for any accident to himself or others through his actions.

The responsibility in preventing accidents is about equally divided between the official in charge and the individual worker. And, in order to reduce accidents to the minimum, it is necessary that the official have the co-operation of the worker and that the worker have the co-operation of the official, so that the co-operation existing will be proportionate to the competency of all concerned. In any case, where the worker or the official is entirely incompetent no co-operation can exist.

This being the case, it is very desirable that competent men be employed as workers and officials, and this can be accomplished by compelling the incompetent workman to serve an apprenticeship under the supervision of a competent person, and by compelling the official to successfully pass a practical and technical examination.

## PRODUCTION BY COUNTIES

County	1911	1912	Increase	Decrease
Boulder .....	936,802	1,053,091	116,289	.....
Delta .....	66,630	65,218	.....	1,412
El Paso .....	331,995	341,885	9,890	.....
Fremont .....	623,044	733,188	110,144	.....
Garfield .....	166,686	178,456	11,770	.....
Gunnison .....	568,294	559,127	.....	9,167
Huerfano .....	1,728,429	1,889,309	160,880	.....
Jackson .....	1,000	38,799	37,799	.....
Jefferson .....	935	83,442	82,507	.....
La Plata .....	107,236	121,111	13,875	.....
Las Animas .....	4,532,664	4,770,292	237,628	.....
Mesa .....	92,384	103,476	11,092	.....
Montezuma .....	1,255	.....	.....	1,255
Pitkin .....	102,059	74,182	.....	27,877
Rio Blanco .....	500	.....	.....	500
Routt .....	372,325	441,002	68,677	.....
Weld .....	495,366	489,379	.....	5,987
Mines not reporting, product es- timated .....	70,000	75,000	5,000	.....
Total tonnage .....	10,197,595	11,016,918	.....	.....

Increase in 1912.....\$19,353

## METAL PRODUCTION, 1911-1912

From Report of Thomas R. Henahan, State Mine Commissioner

	1911	1912
Gold .....	\$19,042,731.70	\$18,691,577.26
Silver .....	3,921,414.75	5,023,960.75
Lead .....	2,925,396.51	3,280,702.62
Copper .....	1,146,135.46	1,445,416.44
Zinc .....	5,696,187.77	8,591,623.73
Tungsten .....	444,000.00	525,000.00
Uranium and vanadium.....	855,600.00	912,312.50
Total .....	\$34,031,466.19	\$38,470,593.30

Increase over production of 1911.....4,301,414.61

There are two new camps in course of development—the Eagle County silver strike, and the reopening of the country contiguous to the old Summitville district in Rio Grande County. The rich gold and tellurium ores which have been uncovered in widely different sections down in the San Juan Mountains give optimistic strength to the mining industry for the coming year.

The recent discovery of ore at a depth of 1,600 feet in the Cripple Creek district is an added indication of the growing production from the mines.

Mr. Henahen estimates the total production of precious metals in Colorado, from the date of the first discovery, at \$1,232,971,559. That is the recorded production, and he believes that millions of dollars more were shipped out of the state of which no record was kept.

NUMBER ENGAGED IN MINING, MILLING, AND SMELTING—  
BY COUNTIES

County	1911	1912
Arapahoe .....	....	....
Archuleta .....	12	13
Boulder .....	423	522
Chaffee .....	390	423
Clear Creek .....	843	861
Conejos .....	14	18
Costilla .....	15	19
Custer .....	163	197
Delta .....	....	....
Denver .....	455	475
Dolores .....	93	158
Douglas .....	35	44
Eagle .....	112	215
El Paso .....	935	918
Fremont .....	70	105
Garfield .....	12	16
Gilpin .....	888	876
Grand .....	55	80
Gunnison .....	270	215
Hinsdale .....	98	114
Huerfano .....	37	68
Jefferson .....	65	67
Lake .....	2,555	2,770
La Plata .....	390	264



Larimer .....	18	21
Mesa .....	60	85
Mineral .....	215	232
Montezuma .....	109	113
Montrose .....	141	168
Ouray .....	684	687
Park .....	153	74
Pitkin .....	206	387
Pueblo .....	*5,822	*5,850
Rio Blanco .....	15	24
Rio Grande .....	68	87
Routt .....	85	110
Saguache .....	108	101
San Juan .....	705	851
San Miguel .....	1,333	1,237
Summit .....	342	511
Teller .....	3,815	4,028
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Totals .....	21,809	23,004

\*Includes employes of C. F. & I. plant and two smelters.

## EMPLOYES ABOVE AND UNDER GROUND

Number of men engaged above ground.....	7,905	7,801
Number of men engaged under ground.....	13,904	15,203
<hr/>		<hr/>
Total number engaged in mining, milling, and smelting.....	21,809	23,004

## MINE ACCIDENTS

## ACCIDENTS ABOVE GROUND

Cause of Accident	1911		1912	
	Fatal	Non-Fatal	Fatal	Non-Fatal
Machinery accidents .....	3	11	..	2
Mill accidents .....	..	19	1	22
Smelter accidents .....	..	..	..	183
Overwinding cage or bucket .....	..	1	..	..
Falling from gallows frame or staging.....	..	2	..	2
Gravity tram .....	1	1	2	1
Tramming, coupling or dumping cars.....	..	11	..	4
Handling loose rock or ore .....	..	..	..	2
Falls in chute or bin, or caught with running ore.....	..	1	..	..
Injured by windlass .....	..	..	..	2
Miscellaneous .....	1	5	..	7
Electricity .....	1	1	2	..
	---	---	---	---
Totals .....	6	52	5	225

## SHAFT ACCIDENTS

Cause of Accident	1911		1912	
	Fatal	Non-Fatal	Fatal	Non-Fatal
Getting on or off cage or bucket in motion at station ..	..	1	1	..
Falls from bucket or cage while being hoisted or lowered .....	1	1	2	..
Caught in shaft while being hoisted or lowered.....	1	..	3	2
Falls from ladder .....	1	..	..	..
Struck by descending cage or bucket.....	..	..	2	..
Pushing car into open shaft, going down with same ..	..	1	1	..
Falls of rock or earth in shaft.....	..	..	..	1
Falling down shaft from level.....	..	..	..	2
Material falling from overloaded bucket.....	..	..	..	3
Cable becoming detached, letting cage down shaft..	1	2	2	2
Miscellaneous .....	..	7	..	1
	---	---	---	---
Totals .....	4	12	11	11

Prior to 1912 smelters did not report accidents to the Department of Mines.

## UNDERGROUND ACCIDENTS

Cause of Accident	1911		1912	
	Fatal	Non-Fatal	Fatal	Non-Fatal
Falls of rock .....	14	85	16	90
Falls of timber while timbering.....	..	3	..	7
Falls from ladder .....	..	..	1	3
Falls from staging while working .....	2	5	1	10
Falls in chute, winze, upraise, or manway.....	3	10	1	4
Caught in chute with running ore.....	1	2	..	4
Injured by tram car .....	2	19	1	26
Struck by flying rock or steel from hammer or pick..	..	2	..	5
Struck with hammer, pick or tools.....	..	3	..	4
Injured handling loose rock or ore .....	1	4	..	5
Falls while carrying tools or material in mine.....	..	..	..	1
Suffocation, bad air, or powder smoke.....	5	1	5	2
Operating machine drill .....	..	7	..	5
Miscellaneous .....	3	15	1	20
Electricity .....	1	1	1	..
	—	—	—	—
Totals .....	32	157	27	186

## EXPLOSIVES

Cause of Accident	1911		1912	
	Fatal	Non-Fatal	Fatal	Non-Fatal
Picking out missed shot .....	..	1	..	4
Drilled into hole that missed fire.....	1	7	..	5
Blast exploded while loading.....	..	..	1	..
Remaining too long after lighting fuse.....	..	1	1	..
Struck unexploded powder or caps with pick or shovel while cleaning away muck .....	..	3	..	..
Hit with flying rock from blast, not being in place of safety .....	..	2	..	..
Explosion, cause unknown .....	..	2	2	1
Miscellaneous .....	..	10	..	2
	—	—	—	—
Totals .....	1	26	4	12
	—	—	—	—
Grand total .....	43	247	47	435

COLORADO SCHOOL-TEACHERS

In our last biennial report, issued 1910, we went to considerable pains to gather the average wages paid teachers in Colorado. As there has been little, if any, change in their condition since that report was issued, we here reproduce it.

In order to secure these data, we prepared and sent to at least 3,700 teachers in Colorado schedules asking for information regarding their work, salary, living expenses, and other things connected with schools. About 1,200 were heard from, from which answers the table presented was compiled.

The table shows that the teachers are among the poorest-paid workers in the state; and it shows plainly that any really strong, efficient, energetic man or woman can make a much better salary in almost any other field of activity, and therefore the best teachers are continually forsaking the schoolroom for better-paid positions elsewhere. And the schools—or, rather, the children—of Colorado are the losers thereby.

The school-teachers have at last awakened to their condition, and are making demands for a minimum wage and better recompense for their services. And there is no class of wage-earners that has greater justice for its demands.

The remarks made by the teachers on the schedules returned were in many cases pitiful. They tell of hundreds and thousands of dollars spent in preparation for what they intended to be a life-work, and of the desire to give the best that was in them to this work; of the long hours of toil spent in the schoolroom and at home; of the many demands made upon their scanty salaries; and, almost invariably, say that their profession affords them but the barest living. Many say that the present will be their last year in the schoolroom, because they cannot exist on the salaries received.

We believe that the presentation of the submitted schedule has been of great assistance to the school-teachers; that it is partially responsible for the present agitation for justice for them; and we hope that it may be of service to this worthy set of workers, and assist them in getting the increase in salaries that their services to the community demand they should receive.

TABLE SHOWING MAXIMUM, MINIMUM, AND AVERAGE WAGES OF  
TEACHERS IN THE PUBLIC SCHOOLS OF COLORADO

County	No. Teachers		Maximum	Minimum		Average Salary
	Replying					
Adams .....	17	\$ 80.00	1 school	\$40.00	2 schools	\$60.00
Arapahoe .....	10	95.00	1 school	40.00	2 schools	52.75
Archuleta .....	2	75.00	1 school	65.00	1 school	67.50
Baca .....	7	65.00	1 school	40.00	3 schools	47.14 2-7
Bent .....	16	140.00	1 school	50.00	2 schools	70.18 3-4
Boulder .....	102	277.00	1 school	40.00	1 school	77.263



County	No. Teachers		Average			
	Replying	Maximum	Minimum		Salary	
Chaffee .....	22	188.88	1 school	50.00	2 schools	77.50
Cheyenne .....	18	55.00	1 school	40.00	2 schools	45.27 2-9
Clear Creek .....	36	177.77 7-9	1 school	50.00	1 school	80.19
Conejos .....	16	166.65	1 school	40.00	2 schools	75.88
Costilla .....	3	80.00	1 school	60.00	1 school	76.66 2-3
Custer .....	3	60.00	2 schools	40.00	1 school	53.33 1-3
Delta .....	16	70.00	1 school	45.00	1 school	59.25
Denver .....	101	300.00	1 school	50.00	3 schools	92.446
Douglas .....	13	70.00	1 school	40.00	2 schools	49.433
Eagle .....	10	100.00	2 schools	50.00	1 school	76.00
Elbert .....	25	80.00	1 school	35.00	1 school	48.80
El Paso .....	69	150.00	1 school	45.00	4 schools	70.85
Fremont .....	51	168.00	1 school	40.00	1 school	72.19
Garfield .....	16	80.00	1 school	50.00	5 schools	64.21 7-8
Gilpin .....	8	105.00	1 school	30.00	1 school	48.80
Grand .....	8	75.00	2 schools	40.00	2 schools	58.125
Gunnison .....	10	125.00	1 school	50.00	2 schools	55.50
Huerfano .....	21	120.00	1 school	35.00	1 school	61.19
Jackson .....	3	90.00	1 school	55.00	1 school	70.00
Jefferson .....	66	166.66 2-3	1 school	50.00	7 schools	66.96
Kiowa .....	10	50.00	9 schools	46.00	1 school	49.60
Kit Carson.....	22	100.00	1 school	40.00	6 schools	45.228
Lake .....	10	125.00	1 school	60.00	1 school	89.07
La Plata.....	22	158.33	1 school	60.00	6 schools	74.52
Larimer .....	63	133.33 1-3	1 school	40.00	2 schools	76.54 4-7
Las Animas.....	32	110.00	1 school	50.00	1 school	72.93
Lincoln .....	19	80.00	1 school	40.00	7 schools	51.84
Logan .....	13	133.35	1 school	42.50	1 school	71.065
Mesa .....	51	100.00	1 school	60.00	7 schools	69.00
Montrose .....	16	100.00	1 school	50.00	2 schools	68.00
Montezuma .....	8	111.10	1 school	60.00	2 schools	67.95
Morgan .....	17	111.11	2 schools	50.00	4 schools	68.75
Ouray .....	12	90.00	1 school	60.00	2 schools	70.00
Park .....	10	110.00	2 schools	45.00	1 school	72.00
Phillips .....	13	65.00	1 school	40.00	5 schools	45.95
Pitkin .....	7	100.00	2 schools	50.00	1 school	75.00
Prowers .....	25	100.00	2 schools	30.00	1 school	61.20
Pueblo .....	38	388.88	1 school	45.00	2 schools	86.775
Rio Grande.....	13	150.00	1 school	45.00	1 school	75.60

County	No. Teachers		Maximum	Minimum		Average Salary
	Replying					
Routt .....	8	100.00	2 schools	50.00	1 school	75.00
Saguache .....	3	75.00	1 school	60.00	2 schools	65.00
San Juan.....	6	166.66 2-3	1 school	70.00	2 schools	94.24
Sedgwick .....	12	133.33 1-3	1 school	40.00	3 schools	62.95
Summit .....	10	136.85	1 school	65.00	1 school	83.43 1-2
Teller .....	47	137.50	1 school	54.00	4 schools	77.25
Washington .....	13	125.00	1 school	35.00	1 school	57.70
Weld .....	58	277.77 2-3	1 school	50.00	5 schools	79.00
Yuma .....	9	65.00	1 school	40.00	4 schools	47.50

INMATES OF STATE PRISONS, COUNTY JAILS AND REFORMATORY INSTITUTIONS

The law creating the department requires a report upon “the number, condition, and nature of the employment of the inmates of the state prison, county jails, and reformatory institutions, and to what extent their employment comes into competition with the labor of mechanics, artisans, and laborers outside of these institutions.”

In this respect the labor of the inmates of these institutions does not come into competition with that of free labor, as the law of the state prohibits it, and the labor unions—if nobody else—have seen that this law should be obeyed.

Colorado is far in advance of many states in the humane and wise treatment of its convicts, the object being to reform the individual and make a good citizen of him, rather than that of brutalizing and degrading him. With this in view, convicts are put to the useful work of road-building—so essential in a state sparsely populated and covering such a large area of ground as does Colorado. The large expense of building good, serviceable roads through our mountain passes could scarcely be accomplished with free labor. The amount of taxes levied to make this possible would be far in excess of the power of the taxpayers of the state and of the localities where these roads have been, and are being, built, to pay. Therefore, the very best use that our convicts can be put to is that of improving the highways of our great state.

There has been but little opposition from labor unions or others to the convicts doing this work. It is generally recognized that, aside from the humanitarian feature of having the convicts do the work, these roads, because of their cost, would not be built at all if they had to be paid for by day labor. However, there should be some provision made to pay the convicts some small

wages when doing this work, so that they would have some funds to maintain themselves on while looking for work when their time of incarceration has expired. While doing this work, convicts are taken out in road gangs, live in tents, are well fed, require but a small number of guards, and seldom indeed make any effort to escape. Appreciating the confidence reposed in them and the kind treatment received, they take a healthy pride in their work, which lays the foundation for future good citizenship.

Warden Thomas J. Tynan, of the State Penitentiary, was, in compliance with the law establishing the Bureau of Statistics, communicated with for the information required in this report. His answer follows:

"Colorado State Penitentiary, Canon City, Colo.,

"September 19, 1912.

"Mr. Edwin V. Brake, Commissioner  
"Bureau of Statistics,  
"Denver, Colo.

"Dear Sir: Answering your letter of September 17, will state that our prison population is 775 males and ten females, making a total of 785. The nature of work required of them is farming, road-building, the manufacture of clothing and shoes for use only at this institution, stone work, wall-building, carpenter, cement and quarry work; all of which are confined strictly to the needs immediately upon the premises. When we have buildings to erect here, it is all done by the inmates.

"The female prisoners repair clothing, darn socks, and do light work of that nature for the inmates of the institution.

"Trusting this is the information you are seeking, we are

"Yours very truly,

(Signed) "F. E. CRAWFORD,

"Chief Clerk."

The same request for information necessary to make this report was sent to Warden Alexander T. Stewart, of the State Reformatory. His answer follows:

"Warden's Office, Colorado State Reformatory,

"Buena Vista, Colo., September 25, 1912.

"Hon. Edwin V. Brake,  
"State Labor Commissioner,  
"Denver, Colo.

"Dear Sir: Complying with your request of the 20th inst., I enclose herewith data regarding the previous employment of the inmates of this institution, together with nativity, ages, etc.



"Regarding the employment of the inmates of this institution, I will say that during the summer months a great majority are employed in the fields, the only exceptions being domestics, office help, etc.

"During the winter months they are employed in the tailor shop, laundry, shoe shop, school, manufacturing concrete blocks, etc.

"All clothing and shoes worn by the inmates are made here at the institution.

"Our live stock requires the services of from ten to fifteen men the year around.

"Trusting this information will be of service to you, and assuring you that I will be glad to give you any further information at any time, I am,

"Yours very truly,

(Signed) "ALEXANDER T. STEWART,  
"Warden."

#### OCCUPATION OF INMATES PREVIOUS TO COMMITMENT

Laborer .....	10	Machinist .....	3
Farmer .....	3	Chauffeur .....	3
Fireman .....	3	Waiter .....	2
Tailor .....	3	Salesman .....	2
Sailor .....	2	Dishwasher .....	1
Miner .....	2	Cowboy .....	1
Bell hop .....	1	Clerk .....	1
Barber .....	1	Paper-ruler .....	1
Brakeman .....	1	Mattress-maker .....	1
Civil engineer .....	1	Baker .....	1
Ironworker .....	1	Furniture polisher.....	1
Candy-maker .....	1	Cook .....	1
Butcher .....	1		—
Steamfitter .....	2	Total .....	55
Teamster .....	5		

#### AGES OF INMATES

Age	No.	Age	No.
16 .....	1	24 .....	4
17 .....	4	25 .....	1
18 .....	8	31 .....	1
19 .....	13	35 .....	1
20 .....	6	39 .....	1
21 .....	2		—
22 .....	8	Total .....	55
23 .....	5		



## NATIVITY OF INMATES

Colorado .....	8	Arkansas .....	1
Illinois .....	4	Mississippi .....	1
Michigan .....	4	Tennessee .....	1
New Jersey.....	3	Minnesota .....	1
Massachusetts .....	3	Montana .....	1
Wisconsin .....	3	Nebraska .....	1
Texas .....	3	Wyoming .....	1
New York.....	2	Oregon .....	1
Iowa .....	2	Old Mexico .....	2
Missouri .....	2	Italy .....	2
Pennsylvania .....	2	Ireland .....	1
Indiana .....	2	Denmark .....	1
Kansas .....	2		—
Georgia .....	1	Total .....	55

The inmates of the county jails of the state in 1911 (census taken June 30) was 487. At the same time there were confined in the reformatory 160, and in the penitentiary 766; a total of 1,413 prisoners confined in state and county institutions.

## INSANE PERSONS

During 1911, 280 persons were adjudged insane, of whom 233 were committed to the state asylum at Pueblo, 109 were cared for in the various county hospitals, while forty-seven were cared for elsewhere; and sixty-two feeble-minded persons were cared for either in county or private institutions.

## REPORT ON AN INVESTIGATION OF THE HIGH COST OF LIVING

The Commercial Club (business men's association) of Indianapolis recently issued a committee's statement from that body as a result of a "high cost of living" investigation. The report covered a period of prices upon commodities from July 31 to October 2, 1912. A table was prepared from weekly reports of prices upon sixteen staple commodities from ten cities, including Indianapolis. Other tables accompany the report that are of vastly more importance than that of the specific prices for approximately two months of the investigation. These latter tables are evidently produced to charge the cause of the high prices somewhere else than against the commission and retail merchants, and naturally direct the charge against the depreciation of the value of gold.

To the wage-earner the table of two months' prices is of no importance. It is made favorable to the business men of Indianapolis, in that it schedules that city as the fourth lowest of the ten cities compared.

Indianapolis, Nashville, Dayton and Columbus are the four lowest-priced cities in the order named, with Dayton and Columbus, Ohio, as near the average. Detroit and Nashville are the extremes, the difference being  $33\frac{1}{3}$  per cent in favor of Nashville. However, to show the unreliability of the comparison, by eliminating the price of tomatoes, Detroit is but 2 per cent higher than Indianapolis, and but 18 per cent above Nashville. In fact, it would make Indianapolis third highest and change the relative standing of other cities in the column.

But the other tables are from reliable statistics and show to the wage-earner that he cannot expect much relief from the cry of "high cost of living," under the present monetary system.

The tables are as follows:

A.					
				What Prices	
				Would Be	Per Cent
				if Gold	Changes
Mercantile			Per Cent	Had Not	in
Commodity	Cost	Cost	Increase	Cheapened	Value
Groups	July 1, 1896	Jan. 1, 1910	of Price		
Breadstuffs .....	.0524	.1050	100	.0656	-25
Live stock .....	.1855	.4010	116	.3506	-35
Provisions .....	1.3619	2.3577	73	1.4735	8
Fruits .....	.1210	.1695	40	.1059	-12
Hides and leather.....	.8250	1.2850	55	.8031	3
Textiles .....	1.5799	2.7333	73	1.7083	8
Metals .....	.3757	.6208	65	.3880	3
Coal and coke.....	.0048	.0069	13	.0043	12
Oils .....	.2082	.3728	79	.2330	12
Naval stores .....	.0402	.0928	134	.0586	46
Builders' materials....	.0716	.0827	15	.0516	27
Chemicals and drugs..	.6607	.5958	9	.3723	42
Miscellaneous .....	.2150	.4067	89	.2541	18

## B.

			What Prices		
			Would Be	Per Cent	
			if Gold	Changes	
Mercantile	Cost	Cost	Had Not	in	
Commodity	July 1, 1896	Jan. 1, 1910	Cheapened	Value	
Groups					
Mess pork .....	8.25	24.50	127	15.3125	85
Wheat .....	.64375	1.28	100	.80	25
Flour .....	3.25	5.40	66	3.375	3
Beef (bbl.) .....	8.50	15.50	82	9.69	14
Hogs .....	3.40	8.60	153	5.375	58
Mackerel .....	20.00	22.00	10	13.75	31
Codfish .....	4.00	7.00	75	4.475	12
Coffee .....	.13	.08375	36	5.23	60
Cotton .....	.074375	.1610	116	10.06	36
Wool .....	.48	.90	87	.56	16
Anthracite .....	4.25	5.00	17	3.125	26
Bituminous .....	2.75	3.15	15	1.98	28
Brick .....	5.25	5.50	4.7	3.44	34
Lime .....	.70	1.02	45	.64	8
Yellow pine .....	17.00	26.00	53	16.25	4
Nails .....	2.80	2.25	25	1.41	49
Beeves (live) .....	.055	.0875	59	.0517	0

Adding to this charge against the depreciation of the value of gold the tightening in proprietorship of land, with its assured increase in value and flat values as the creation of watered stock in "frenzied" finance, for what relief has the wage-earner any hope?

Isn't it a most observable fact that it is low wages rather than high cost of living that brings distress to the wage-earner?

# CHAPTER X

## ASSESSORS' SCHEDULES

### COLORADO AGRICULTURAL AND GRAZING LANDS

(Assessors' Schedules, 1911)

County	Agricultural		Grazing	
	Acres	Value	Acres	Value
Adams .....	164,546	\$2,571,530.00	344,089.63	\$ 566,545.60
Arapahoe .....	23,500	840,590.00	330,345	599,165.00
Archuleta .....	.....	.....	.....	.....
Baca .....	.....	.....	335,285	523,882.00
Bent .....	39,047.19	798,404.00	129,528.04	230,103.00
Boulder .....	97,034	2,107,625.00	136,956	464,610.00
Chaffee .....	18,128	222,420.00	58,986	71,963.00
Cheyenne .....	.....	.....	.....	.....
Clear Creek .....	29,472	74,285.00	.....	.....
Conejos .....	139,362	1,204,213.00	145,620	218,230.00
Costilla .....	108,452	622,514.48	156,723	188,067.60
Crowley .....	34,007.71	869,471.00	59,970.04	108,119.00
Custer .....	6,548	53,970.00	94,785	123,630.00
Delta .....	96,932	2,462,470.00	70,037	87,545.00
Dolores .....	765	4,710.00	5,726	7,157.00
Douglas .....	29,227	131,840.00	340,233	597,255.00
Eagle .....	20,331	241,611.00	57,838	114,459.00
Elbert .....	40,210	190,201.00	734,624	997,603.00
El Paso .....	177,407	978,540.00	473,247	709,870.00
Fremont .....	2,690,204	707,190.00	.....	130,509.00
Garfield .....	41,285	815,260.00	126,649	214,105.00
Grand .....	21,406	107,030.00	93,476	93,476.00
Gunnison .....	28,046	228,340.00	79,619	119,505.00
Hinsdale .....	.....	.....	10,420	17,202.00
Huerfano .....	17,892	175,981.00	263,720	331,163.00
Jackson .....	.....	.....	111,221	139,027.00
Jefferson .....	60,244	1,505,850.00	249,530	1,778,265.00
Kiowa .....	2,881	5,768.00	379,398	474,245.00
Kit Carson .....	30,000	53,400.00	202,961	1,073,126.00
Lake .....	.....	.....	26,601	91,312.60



County	Agricultural		Grazing	
	Acres	Value	Acres	Value
La Plata .....	37,928	566,335.00	162,514	282,465.00
Larimer .....	115,344	2,379,700.00	476,261	605,655.00
Las Animas .....	48,310	369,034.00	659,895	990,002.00
Lincoln .....	.....	.....	656,038	988,300.00
Logan .....	311,547	1,870,885.00	186,993	305,385.00
Mesa .....	71,031	1,499,440.00	134,612	359,430.00
Mineral .....	1,981	7,921.00	20,990	33,578.00
Moffat .....	17,597	154,650.00	81,383	163,855.00
Montezuma .....	57,098	740,055.00	63,417	82,235.00
Montrose .....	78,203	7,820,300.00	111,744	1,340,928.00
Morgan .....	65,094	1,046,890.00	119,535	230,085.00
Otero .....	98,541	2,441,525.00	104,978	180,140.00
Ouray .....	10,012	130,700.00	54,824	113,369.00
Park .....	22,561	157,927.00	165,126	177,801.00
Phillips .....	385,741	928,476.00	.....	.....
Pitkin .....	14,425.75	213,055.00	35,483.75	71,820.00
Prowers .....	101,566	8,633,110.00	228,046	1,140,230.00
Pueblo .....	81,817	1,657,464.00	572,683	863,151.00
Rio Blanco .....	19,500	175,500.00	82,885	116,855.00
Rio Grande .....	69,586	685,445.00	91,737	175,460.00
Routt .....	52,660	469,905.00	152,439	331,790.00
San Miguel .....	11,218	89,980.00	64,728	101,160.00
San Juan .....	.....	.....	200	560.00
Sedgwick .....	22,167	268,160.00	278,039	503,685.00
Summit .....	2,812	14,060.00	16,743.58	21,465.00
Teller .....	4,438	22,350.00	89,314	130,730.00
Washington .....	587,472	4,989,534.00	500,000	1,500,000.00
Weld .....	287,109	5,631,700.00	950,551	2,192,160.00
Yuma .....	485,963	1,195,020.00	146,460	175,680.00

## OIL AND PUBLIC LANDS, AND LAND VALUES

County	Oil Acres	Public Acres	Values of Land—Acre	
			Improved	Unimproved
Adams .....	.....	.....	\$50.00-\$100.00	\$6.00-\$10.00
Arapahoe .....	.....	.....	75.00- 175.00	40.00-100.00
Baca .....	.....	1,264,715	5.00- 10.00	4.00- 10.00
Bent .....	.....	.....	85.00	60.00
Boulder .....	420	.....	.....	.....
Cheyenne .....	.....	.....	15.00	6.00

County	Oil Acres	Public Acres	Values of Land—Acre	
			Improved	Unimproved
Clear Creek .....	.....	.....	10.00- 25.00	2.50- 5.00
Conejos .....	.....	106,25	25.00	5.00
Costilla .....	.....	.....	30.00	5.00
Crowley .....	.....	.....	100.00	50.00
Custer .....	.....	.....	25.00	1.25
Delta .....	.....	.....	50.00- 500.00	20.00- 50.00
Dolores .....	.....	.....	18.00	4.00
Douglas .....	.....	.....	12.00- 25.00	8.00
Eagle .....	.....	.....	100.00	3.75
El Paso .....	.....	.....	50.00	6.00
Fremont .....	.....	.....	52.13	6.00
Garfield .....	.....	.....	90.00	20.00
Gunnison .....	.....	.....	30.00- 40.00	.....
Hinsdale .....	.....	.....	1.50	1.50
Huerfano .....	.....	.....	30.00	5.00
Jackson .....	.....	.....	30.00	10.00
Jefferson .....	.....	.....	25.00	2.70
Kiowa .....	.....	.....	6.00	5.00
Kit Carson .....	.....	.....	10.00	5.00
La Plata .....	.....	.....	30.00	5.00
Las Animas .....	.....	.....	5.00- 100.00	3.00- 5.00
Lincoln .....	.....	.....	10.00	5.00
Logan .....	.....	.....	31.00	5.00- 8.00
Mesa .....	.....	.....	30.00-1,500.00	5.00- 25.00
Mineral .....	.....	.....	12.00	5.00
Moffat .....	.....	.....	10.00	5.00
Montezuma .....	.....	.....	45.00	20.00
Montrose .....	.....	.....	100.00	12.00
Morgan .....	.....	.....	50.00	15.00
Otero .....	.....	.....	100.00	15.00
Ouray .....	.....	.....	12.30	1.35
Park .....	.....	.....	21.00	2.75
Phillips .....	.....	.....	20.00	12.00
Prowers .....	.....	.....	85.00	5.00
Pueblo .....	.....	.....	125.00	5.00
Rio Blanco .....	120	.....	50.00	10.00
Rio Grande .....	.....	.....	50.00	20.00
Routt .....	.....	22,806	30.00- 60.00	5.00- 10.00

County	Oil Acres	Public Acres	Values of Land—Acre	
			Improved	Unimproved
Saguache .....	....	....	50.00	10.00
San Miguel .....	....	....	8.60	1.56
Sedgwick .....	....	16,746	50.00	6.00
Summit .....	....	....	15.00- 30.00	3.00- 5.00
Teller .....	....	....	12.50	1.50
Washington .....	....	500,000	15.00	6.00
Weld .....	....	....	75.00	10.00

## MINERAL LANDS

(Assessors' Schedules, 1911)

County	Acres	Coal	Improvements			Gross	Other Mineral	
			Value	Metalliferous— Value	on Mining Claims— Value		Output— Value	Acres      Lands Value
Boulder .....	5,083		\$175,485	\$608,580	\$354,550	.....	.....	3,752      \$59,340
Chaffee .....	....		.....	136,080	.....	\$ 19,100	.....	.....
Clear Creek .....	....		.....	653,900	.....	130,100	.....	.....
Conejos .....	....		.....	15,690	.....	.....	.....	.....
Costilla .....	....		.....	16,210	.....	.....	1,581	15,810
Custer .....	....		.....	34,320	48,225	.....	.....	.....
Delta .....	4,253		97,060	.....	.....	.....	.....	.....
Dolores .....	681		6,810	80,079	24,222	26,800	185.43	1,854
Eagle .....	....		.....	.....	8,180	124,084	5,338	89,162
Fremont .....	....		23,992	7,945	.....	.....	.....	.....
Garfield .....	3,406		128,585	.....	.....	.....	2,338	12,180
Grand .....	....		.....	12,055	1,250	.....	.....	.....
Gunnison .....	12,255		652,280	349,325	139,200	679,480	.....	.....
Hinsdale .....	....		.....	156,925	110,125	52,860	.....	.....
Huerfano .....	1,641		155,995	.....	.....	.....	.....	.....



Jackson .....	3,597	19,585	.....	.....	.....	296	1,480
Jefferson .....	1,245	17,965	300	.....	.....	.....	.....
Lake .....	....	.....	910,085	553,925	637,751	.....	.....
La Plata .....	12,578	254,990	111,275	65,590	55,775	15,083	39,740
Larimer .....	....	.....	.....	.....	.....	853	4,635
Las Animas .....	89,059	1,667,790	.....	.....	.....	.....	.....
Mesa .....	2,649	52,580	.....	.....	.....	.....	.....
Mineral .....	....	.....	.....	97,164	615,232	2,763	82,113
Moffat .....	5,094	53,460	.....	.....	.....	.....	.....
Montezuma .....	....	.....	.....	.....	.....	787	15,050
Ouray .....	260	2,080	278,720	177,535	Net	.....	1,403,651
Park .....	3,269	19,614	.....	217,208	336,340	.....	.....
Pitkin .....	10,227	143,055	216,290	47,845	71,965	.....	.....
Rio Blanco .....	4,520	.....	.....	.....	.....	.....	.....
Rio Grande .....	....	.....	17,890	.....	.....	.....	.....
Routt .....	74,700	807,290	16,340	1,620	.....	.....	.....
Saguache .....	....	.....	65,050	8,733	.....	.....	.....
San Miguel .....	40	400	228,810	375,700	3,497,639	6,412	37,370
San Juan .....	....	.....	691,561	380,555	1,173,305	195	975
Summit .....	....	.....	376,781	339,086	607,261	520	4,160
Teller .....	....	.....	1,743,080	1,235,760	9,996,537	9,878,198	77,010

MILES OF RAILROAD  
(Assessors' Schedules, 1911)

County	Miles	Value	Other R. R. Property
Adams .....	157.47	\$1,403,230	\$41,740
Arapahoe .....	89.50	762,770	30,380
Bent .....	77.62	667,940	22,940
Boulder .....	179.57	1,178,670	45,130
Chaffee .....	156.91	1,384,340	42,710
Cheyenne .....	63.13	832,230	30,010
Clear Creek.....	41.77	265,330	7,185
Conejos .....	73.85	699,360	2,647
Costilla .....	95.25	722,947.50	327
Crowley .....	31.50	386,840	.....
Custer .....	13.05	123,580	.....
Delta .....	69.75	660,830	6,570
Denver .....	72.33	891,410	.....
Dolores .....	17.70	91,960	.....
Douglas .....	89.69	1,062,510	42,280
Eagle .....	102.64	878,880	37,670
Elbert .....	83.18	971,080	82,140
Fremont .....	144.10	1,456,610	.....
Garfield .....	162.91	1,519,650	61,880
Grand .....	76.68	427,450	8,000
Gunnison .....	184.54	1,644,550	14,940
Hinsdale .....	9.45	89,490	890
Huerfano .....	215.38	935,730	22,900
Jefferson .....	106.24	790,990	.....
Kiowa .....	87.50	1,074,570	.....
Kit Carson.....	59.96	74,800	25,960
Lake .....	93.04	819,570	28,680
La Plata.....	120.60	1,016,830	47,755
Larimer .....	125.17	663,150	32,280
Las Animas.....	229.85	2,791,540	75,280
Lincoln .....	72.85	966,700	31,720
Logan .....	133.56	.....	.....
Mesa .....	112.14	105,786	38,920
Montezuma .....	62.80	326,300	5,020
Montrose .....	52	496,220	7,940
Otero .....	98.32	1,134,850	.....
Ouray .....	42.50	306,410	3,530
Park .....	154.16	1,282,000	30,770

County	Miles	Value	Other R. R.
			Property
Phillips .....	36.30	491,700	10,001
Pitkin .....	86.58	673,370	14,120
Prowers .....	80.42	694,730	.....
Pueblo .....	269.78	2,516,520	96,890
Rio Blanco.....	7.80	61,430	1,180
Rio Grande.....	40.8	386,370	9,960
Routt .....	57.5	320,480	7,400
Saguache .....	106.6	1,009,500	.....
San Miguel.....	47.70	247,840	.....
San Juan.....	42.10	196,980	.....
Sedgwick .....	32.07	491,560	13,340
Summit .....	68.8	611,807	200
Teller .....	1,095.37	1,237,800	1,250
Washington .....	40.33	546,920	16,760
Yuma .....	40.51	548,720	16,650

## MILES OF TELEGRAPH AND TELEPHONE LINES

(Assessors' Schedules, 1911)

County	Telegraph Lines		Telephone Lines	
	Miles	Value	Miles	Value
Adams .....	1,039.98	\$ 32,250	1,668.71	\$ 31,650
Arapahoe .....	635.70	20,480	1,324.92	27,530
Baca .....	.....	.....	110	4,460
Bent .....	442.32	13,960	992.84	21,790
Boulder .....	570.76	11,520	8,609.26	148,160
Chaffee .....	631.54	19,340	1,632.08	28,090
Cheyenne .....	.....	17,870	150	7,500
Clear Creek.....	3,340	1,040	1,296.93	22,320
Conejos .....	231.61	7,200	1,309.92	22,540
Costilla .....	189.81	5,890.25	466.41	8,073.53
Crowley .....	239.64	7,860	583.71	10,040
Custer .....	50.60	1,570	225.84	3,890
Delta .....	182.68	5,680	2,050.44	44,730
Denver .....	663.43	26,450	97,808.07	1,683,280
Dolores .....	35.00	1,090	.....	.....
Douglas .....	1,761.45	54,250	1,899.50	32,690
Eagle .....	403.15	12,530	768.20	13,860
Elbert .....	563.08	17,500	120.06	5,510
Fremont .....	867	25,050	3,506.02	60,340

County	Telegraph Lines		Telephone Lines	
	Miles	Value	Miles	Value
Garfield .....	658.90	19,720	2,292.58	55,510
Grand .....	13.60	27,200	422.93	7,280
Gunnison .....	535.34	15,510	755.58	16,130
Hinsdale .....	9.45	1,170	60.08	1,030
Huerfano .....	757.47	21,970	1,021.24	17,570
Jackson .....	207.68	5,230	.....	.....
Jefferson .....	232.81	7,250	2,831.42	48,720
Kiowa .....	350	10,880	17	290
Kit Carson.....	486.40	15,120	59	1,900
Lake .....	423.23	12,860	2,185.54	37,600
La Plata.....	278.82	8,670	1,632.98	28,400
Larimer .....	130.76	4,060	7,232.65	124,890
Las Animas.....	1,415.85	40,610	4,732.17	81,440
Lincoln .....	627.70	19,510	177.68	3,050
Logan .....	557.28	.....	1,923.10	.....
Mesa .....	575.77	17,890	5,784.87	99,650
Moffat .....	.....	.....	257	9,640
Montezuma .....	123	5,280	263.67	7,360
Montrose .....	212	6,590	1,362	23,440
Morgan .....	971.88	29,390	1,581.03	27,200
Otero .....	798.15	27,520	2,913.42	50,140
Ouray .....	143.21	4,450	738.66	12,710
Park .....	664.57	20,570	1,058.72	18,220
Phillips .....	.....	.....	52	890
Pitkin .....	312.58	9,480	648.48	11,770
Prowers .....	724.59	24,340	16,533	28,320
Pueblo .....	1,832.22	54,080	10,668.24	188,070
Rio Blanco .....	.....	.....	383.32	8,430
Rio Grande .....	178	2,540	652.00	11,220
Routt .....	.....	.....	908.89	22,390
Saguache .....	335.03	10,080	538.69	9,270
San Miguel .....	111.20	3,460	.....	10,810
San Juan .....	26.2	820	731.59	12,590
Sedgwick .....	374.91	11,470	458.47	9,590
Summit .....	138.41	4,300	764.90	13,160
Teller .....	465.98	13,440	5,079.06	87,990
Washington .....	418.79	13,030	188.36	3,240
Yuma .....	405.10	12,590	136.50	7,580



## WORK ANIMALS

County	Horses		Mules		Asses	
	No.	Value	No.	Value	No.	Value
Adams .....	4,031	\$133,315	211	\$ 8,790	...	\$ 92,980
Arapahoe .....	3,830	135,370	69	3,460	...	.....
Baca .....	4,108	74,311	583	15,345	...	.....
Bent .....	3,339	96,990	345	11,567	...	.....
Boulder .....	5,823	189,640	535	17,395	...	.....
Chaffee .....	1,412	31,940	13	300	5	25
Cheyenne .....	3,310	79,880	280	780	...	.....
Clear Creek.....	412	11,510	5	125	43	430
Conejos .....	4,041	9,798	121	3,862	...	.....
Costilla .....	2,399	69,571	203	8,120	20	100
Crowley .....	2,614	86,565	141	5,665	...	.....
Custer .....	1,363	35,025	8	175	...	.....
Delta .....	4,036	128,440	125	4,660	5	170
Denver .....	2,768	328,030	268	15,850	...	.....
Dolores .....	393	10,440	25	760	12	65
Douglas .....	2,515	87,495	85	2,730	...	.....
Eagle .....	2,110	60,605	12	300	21	56
Elbert .....	3,428	97,760	176	6,045	...	.....
Fremont .....	3,640	88,100	178	5,990	...	.....
Garfield .....	5,168	131,080	159	4,170	...	.....
Grand .....	2,546	54,520	8	220	8	.....
Gunnison .....	2,668	57,510	133	4,325	8	50
Hinsdale .....	362	8,331	99	3,920	13	65
Huerfano .....	2,793	94,987	297	11,000	27	135
Jackson .....	3,433	95,995	.....	.....	...	.....
Jefferson .....	4,612	147,775	112	3,885	...	.....
Kiowa .....	3,033	63,538	268	8,695	...	.....
Kit Carson .....	8,931	239,960	790	26,627	28	4,425
Lake .....	854	26,815	26	230	...	.....
La Plata .....	4,053	125,735	236	6,640	82	415
Larimer .....	9,695	295,515	598	24,275	...	.....
Las Animas.....	9,432	239,414	1,207	43,660	12	600
Lincoln .....	4,757	129,855	309	10,385	...	.....
Logan .....	8,662	.....	480	.....	...	.....
Mesa .....	7,344	195,540	403	11,105	...	.....
Mineral .....	291	5,478	5	188	...	.....
Moffat .....	5,322	185,570	15	595	...	.....
Montezuma .....	3,204	141,180	101	7,170	101	505

County	Horses		Mules		Asses	
	No.	Value	No.	Value	No.	Value
Montrose .....	6,602	166,230	138	3,980	30	605
Morgan .....	5,197	162,595	427	14,970	4	500
Otero .....	8,731	291,372	690	29,490	...	.....
Ouray .....	1,477	33,215	47	1,155	69	197
Park .....	1,910	36,533	44	1,255	75	317
Phillips .....	3,848	76,040	169	3,380	...	.....
Pitkin .....	1,711	44,125	27	890	...	.....
Prowers .....	7,988	508,710	1,053	78,995	...	.....
Pueblo .....	8,965	348,240	506	32,870	...	.....
Rio Blanco .....	4,145	95,580	35	1,070	...	.....
Rio Grande.....	3,290	120,585	340	17,540	...	.....
Routt .....	5,978	202,375	229	8,530	...	.....
Saguache .....	3,710	.....	143	.....	...	.....
San Miguel.....	2,081	73,660	193	6,750	77	1,050
San Juan.....	136	3,885	61	1,232	11	55
Sedgwick .....	2,813	72,350	141	4,405	...	.....
Summit .....	648	14,790	4	80	17	85
Teller .....	1,605	38,470	22	530	...	.....
Washington .....	8,132	682,050	426	46,800	...	.....
Yuma .....	11,827	295,025	1,453	34,960	22	2,485

## LIVE STOCK

County	Cattle		Sheep		Swine		All Other Animals	
	No.	Value	No.	Value	No.	Value	No.	Value
Adams .....	7,923	.....	10,332	\$ 15,455.00	5,058	\$22,110	....	\$ 495
Arapahoe .....	8,779	\$146,460	14,360	21,615.00	1,092	7,150	31	1,095
Baca .....	15,050	130,060	56,950	85,366.00	605	1,399	45	1,665
Bent .....	7,621	66,532	200,063	154,513.00	1,426	3,003	....	.....
Boulder .....	9,918	121,555	3,407	3,455.00	1,068	4,230	4,700	4,700
Chaffee .....	4,563	39,700	50	70.00	548	2,270	891	4,095
Cheyenne .....	13,141	139,405	10,950	16,425.00	230	2,745	41	4,270
Clear Creek .....	549	7,145	.....	.....	.....	.....	....	.....
Conejos .....	9,148	91,089	118,277	121,089.00	1,627	6,736	....	.....
Costilla .....	6,149	61,490	23,513	35,269.50	902	2,706	46	1,556
Crowley .....	5,491	50,518	21,650	28,950.00	1,562	4,845	....	.....
Custer .....	8,028	64,635	1,545	3,860.00	349	1,200	....	.....
Delta .....	11,264	126,950	17,536	35,085.00	554	1,695	.. .	.....

County	Cattle		Sheep		Swine		All Other Animals	
	No.	Value	No.	Value	No.	Value	No.	Value
Denver .....	2,489	50,850	.....	.....	.....	.....	623	3,760
Dolores .....	6,397	52,881	3,350	5,025.00	22	90	....	.....
Douglas .....	13,829	177,135	1,015	1,525.00	732	3,720	....	.....
Eagle .....	11,662	121,545	8,931	13,182.00	179	974	1	150
Elbert .....	11,404	112,810	37,573	53,085.00	275	1,360	....	.....
Fremont .....	12,654	120,865	.....	.....	372	2,475	....	.....
Garfield .....	18,852	166,395	9,801	14,700.00	2,115	7,105	....	6,820
Grand .....	10,299	92,595	1,509	2,270.00	116	580	....	.....
Gunnison .....	22,135	186,285	40,991	81,820.00	136	635	....	.....
Hinsdale .....	2,282	18,906	59,506	88,504.00	.....	.....	....	.....
Huerfano .....	8,867	114,123	40,741	61,111.00	203	810	457	467
Jackson .....	31,460	257,526	2,415	4,655.00	42	130	49	4,115
Jefferson .....	9,390	122,750	762	950.00	1,317	6,125	....	.....
Kiowa .....	9,663	97,245	26,217	32,770.00	323	958	19	1,265
Kit Carson .....	18,878	175,479	4,583	6,926.00	2,350	9,088	16	195
Lake .....	1,155	21,075	18,957	26,920.00	.....	.....	....	.....
La Plata .....	12,005	112,745	57,074	108,465.00	1,738	6,573	....	.....
Larimer .....	19,334	183,305	28,304	20,200.00	2,375	8,190	246	1,215
Las Animas .....	31,517	368,394	259,644	406,717.00	1,175	5,536	....	.....
Lincoln .....	20,001	165,515	66,000	100,385.00	602	1,765	....	.....
Logan .....	17,624	.....	846	.....	1,355	.....	....	.....
Mesa .....	19,354	181,650	18,078	27,110.00	1,378	4,530	....	.....
Mineral .....	545	4,866	4,100	5,350.00	.....	.....	....	.....
Moffat .....	34,796	427,552	10,800	21,600.00	258	1,245	200	2,000
Montezuma .....	12,077	159,170	31,374	59,290.00	827	4,135	2	400
Montrose .....	16,540	140,597	54,050	96,850.00	1,637	5,255	....	.....
Morgan .....	10,219	113,026	23,026	25,410.00	3,047	8,410	4	500
Otero .....	18,679	181,736	57,771	73,035.00	4,831	15,401	4,803	4,803
Ouray .....	5,482	45,991	9,068	18,136.00	173	695	....	.....
Park .....	12,902	103,988	18,579	27,868.00	20	100	....	.....
Phillips .....	6,212	53,386	32	32.00	1,454	4,362	35	2,690
Pitkin .....	5,401	48,915	19,815	22,020.00	441	1,595	15	90
Prowers .....	14,602	265,050	215,275	452,800.00	3,365	17,915	360	30,735
Pueblo .....	24,686	349,975	17,441	26,970.00	2,634	13,560	....	.....
Rio Blanco .....	30,285	341,477	18	36.00	242	730	....	.....
Rio Grande .....	6,327	47,970	40,756	61,340.00	3,706	10,325	23	.....
Routt.. .....	26,843	274,705	62,926	94,430.00	1,028	5,210	82	915
Saguache .....	20,611	.....	60,286	.....	2,096	.....	395	.....

County	Cattle		Sheep		Swine		All Other Animals	
	No.	Value	No.	Value	No.	Value	No.	Value
San Miguel .....	12,323	110,560	3,048	6,090.00	179	770	....	.....
San Juan .....	85	1,275	1,425	2,138.00	.....	.....	....	.....
Sedgwick .....	4,952	45,245	481	355.00	1,137	4,815	15	1,080
Summit .....	2,061	26,819	1,400	2,100.00	10	50	....	.....
Teller .....	5,643	55,540	11	30.00	179	920	42	1,640
Washington .....	20,431	537,600	13,297	59,835.00	2,780	26,160	....	.....
Yuma .....	27,943	226,200	2,064	2,085.00	7,872	23,845	....	925

### UNITED STATES CENSUS FIGURES, 1909, AND ASSESSORS FIGURES, 1911

The vast difference between the figures of the United States Census and those of the county assessors in the animals enumerated below, together with their valuation, as compiled by the State Tax Commission, is worthy of reproduction here.

#### TABLE OF VALUATIONS

(This table gives the totals and valuation.)

##### Cattle—

Number reported by census.....	1,127,737
Number assessed by assessor.....	783,968
Difference .....	343,769
Value reported by census.....	\$31,017,303
Value assessed by assessor.....	7,811,406
Percentage .....	25.1

##### Horses—

Number reported by census.....	294,035
Number assessed by assessor.....	246,975
Difference .....	47,060
Value reported by census.....	\$27,382,926
Value assessed by assessor.....	7,506,210
Percentage .....	27.4



## Mules—

Number reported by census.....	14,739
Number assessed by assessor.....	14,277
Difference .....	462
Value reported by census.....	\$ 1,798,535
Value assessed by assessor.....	524,559
Percentage .....	29.1

## Asses—

Number reported by census.....	3,233
Number assessed by assessor.....	520
Difference .....	2,713
Value reported by census.....	\$ 136,732
Value assessed by assessor.....	9,668
Percentage .....	7

## Swine—

Number reported by census.....	179,294
Number assessed by assessor.....	60,871
Difference .....	118,423
Value reported by census.....	\$ 1,568,158
Value assessed by assessor.....	253,678
Percentage .....	16.2

## Sheep—

Number reported by census.....	1,426,214
Number assessed by assessor.....	1,463,861
Difference .....	None
Value reported by census.....	\$ 6,853,187
Value assessed by assessor.....	2,165,838
Percentage .....	31.6

## Goats—

Number reported by census.....	31,611
Number assessed by assessor.....	23,709
Difference .....	7,902
Value reported by census.....	\$ 80,644
Value reported by assessor.....	37,207
Percentage .....	46.1

## Poultry—

Number reported by census.....	1,721,445
Number assessed by assessor.....	None
Difference .....	None
Value reported by census.....	\$ 1,012,251
Value reported by assessor.....	None
Percentage .....	None

## Bees—

Number reported by census.....	71,434
Number assessed by assessor.....	14,620
Difference .....	56,814
Value reported by census.....	\$ 308,608
Value reported by assessor.....	14,650
Percentage .....	4.7









